PROJECT TABLE OF CONTENTS

-- End of Project Table of Contents --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01025

MEASUREMENT AND PAYMENT

-- End of Section Table of Contents --

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 LUMP SUM PAYMENT ITEMS

1.1.1 General

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the BIDDING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

1.1.2 Lump Sum Items

a. "Mobilization and Demobilization" Item No. 0001

(1) Payment will be made for costs associated with mobilization and demobilization, as defined in Special Contract Clause PAYMENT FOR MOBILIZATION AND DEMOBILIZATION.

(2) Unit of measure: lump sum.

1.2 UNIT PRICE PAYMENT ITEMS

1.2.1 General

Payment items for the work of this contract on which the contractunit price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

1.2.2 Unit Price Items

a. "Dredging" Item No. 0002

(1) This item shall include all work as specified in SECTION 02482 DREDGING. The Contract unit price per cubic yard of dredging shall include the cost of removal, conveyance and placement of all materials as shown on the drawings and as specified herein, except original materials, and ledge rock, which cannot be removed or buried below the required depth by the plant specified in the accepted bid, or the equivalent of such plant, without blasting or special apparatus. The unit price shall also include the cost of all work required to be performed for the use of the placement

area. Nothing in this paragraph shall be construed as prohibiting the removal of excepted material by special means at the prices agreed and approved in accordance with applicable provisions of the contract.

(2) Unit of measure: Payment for all acceptably completed work required under SECTION 02482 of the specifications will be made at the applicable contract unit price per cubic yard for the payment items, "Dredging:" "First 7,500 CY", and "Over 7,500 CY".

PART 2 PRODUCTS (NOT APPLICAVLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01090

SOURCES FOR REFERENCE PUBLICATIONS

-- End of Section Table of Contents --

SECTION 01090

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the sponsoring organization, e.g. UL 1 (1993; Rev thru Jan 1995) Flexible Metal Conduit. However, when the sponsoring organization has not assigned a number to a document, an identifying number has been assigned for convenience, e.g. UL's unnumbered 1995 edition of their Building Materials Directory is identified as UL-01 (1995) Building Materials Directory. The sponsoring organization number (UL 1) can be distinguished from an assigned identifying number (UL-01) by the lack of a dash mark (-) in the sponsoring organization assigned number.

1.2 ORDERING INFORMATION

The addresses of the organizations whose publications are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the sponsoring organization should be ordered from the source by title rather than by number.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Ph: 610-832-9585
Fax: 610-832-9555
E-mail: cservice@astm.org

CODE OF FEDERAL REGULATIONS (CFR)

Order from:
Government Printing Office
Washington, DC 20402
Ph: 202-512-1800
Fax: 202-275-7703
Internet: http://www.pls.com:8001/his/cfr.html

CORPS OF ENGINEERS (COE)

Order from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services Branch, TIC

3909 Halls Ferry Rd.
Vicksburg, MS 39180-6199
Ph: 601-634-2355
Fax: 601-634-2506

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

Financial Services Division
Burea of Finance
P.O. Box 30050
425 W. Ottawa St.
Lansing, Mi 48909
Modem: 517-355-0014

ENGINEERING MANUALS (EM)
SAFETY AND HEALTH REQUIREMENTS MANUAL

USACE Publications Depot
Attn: CEIM-SP-D
2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081
* Manual is also located located in the RMS Module and also placed on the Contract CD.

ENGINEERING REGULATIONS (ER)

USACE Publications Depot
Attn: CEIM-SP-D 2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081

ENVIRONMENTAL PROTECTION AGENCY (EPA)

Public Information Center
401 M St., SW
Washington, DC 20460
Ph: 202-260-7751
FAX: 202-260-6257
Internet: http://www.epa.gov NOTE: Some documents are available only from National Technical Information
Services (NTIS)
5285 Port Royal Rd.
Springfield, VA 22161
Ph: 703-487-4600
Fax: 703-321-8547
Internet: http://www.fedworld.gov/ntis/ntishome.html

PART 2 (Not Applicable)

PART 3 (Not Applicable)

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01100

SPECIAL PROJECT PROCEDURES

-- End of Section Table of Contents --

SECTION 01100
SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred within the text by the basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

33 CFR 320-330	General Regulatory Policies, Permits, Enforcement and Definitions
40 CFR 233	State Program Regulations

U.S. ARMY CORPS OF ENGINEERS

EM 385-1-1	Safety and Health Requirements Manual

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL PROCEDURES":

SD-01 Data

Accident Prevention Plan; G-AOF

Contractor shall provide an accident prevention plan including an activity hazard analysis to the Contracting Officer within 15 calendar days after receipt of award. Safety Management System information can be submitted in lieu of the Accident Prevention Plan in accordance with the Contract Clause for Dredging and Dredge Related Marine Work.

Payrolls and Basic Records; G-AOF

Contractor shall submit payrolls and basic records in accordance with the clause entitled "PAYROLLS AND BASIC RECORDS (FEB 1988).

SD-01 Preconstruction Submittals

Progress Chart; G-AOF

Contractor shall submit progress chart in accordance with the clause entitled "SCHEDULE FOR CONSTRUCTION CONTRACTS (APR 1984).

1.3 PRECONSTRUCTION CONFERENCE

After award of a contract, a conference will be arranged by the Contracting

Officer's Representative between responsible personnel of the Contractor, Area Office and District Office. At this conference, the Contractor will be oriented with respect to Government procedures and line of authority for wage rates, contractual, administrative, and construction matters.

1.4 REGULATORY REQUIREMENTS

1.4.1 Additional Work Proposed and Not Authorized

1.4.1.1 Work Subject to 33 CFR 320-330

Any additional work (not specifically shown on the plans or delineated in the specifications) proposed by the Contractor in or affecting navigable waters, including wetlands (as defined in 33 CFR 320-330, published in the Federal Register Vol.51, No. 219, Thursday, November 13, 1986) shall not be performed without a Department of the Army Permit. This requirement shall be applicable to all work, permanent or *temporary*, and/or fill(s). The Department of the Army Permit shall be approved by the District Engineer or Deputy District Engineer in accordance with the laws of the United States and the regulations promulgated thereunder, including, but not limited to, the River and Harbor Act of 1899, the Clean Water Act and the National Environmental Policy Act of 1969, as amended. Corps employees (Contracting Officer's Representatives (COR) or inspectors) are not delegated authority to authorize such work. Information on making application for such permit(s) may be obtained by contacting one of the offices as listed hereinafter. When applying for information or a permit, a copy of any correspondence should be directed to the Contracting Officer of this contract. If a permit is not obtained, the additional work cannot be accomplished. Any delay in processing the permit will not constitute the basis of a claim under this contract. The fact that the Contractor is performing work under a Department of the Army Contract will give the Contractor no greater rights than any other applicant for a Department of the Army Permit.

MICHIGAN-INDIANA

Regulatory Office
Engineering & Technical Services Division
U.S. Army Engineer District, Detroit
P. O. Box 1027
Detroit, MI 48231
Telephone: 313-226-6813

1.4.1.2 Work Subject to 40 CFR 233

Any additional work (not specifically shown on the plans or included in the specifications), proposed by the Contractor, in or affecting waters of the United States, including wetlands, in the State of Michigan (as defined in 40 CFR 233, published in the Federal Register, Vol. 49 No. 192, Tuesday October 2, 1984) shall not be performed without a State of Michigan regulatory permit. Information on making an application for such permit may be obtained by contacting the office listed hereinafter. When applying for a permit or for information, a copy of any correspondence shall be furnished to the Contracting Officer. If a permit is not obtained, the additional work shall not be performed. Any delay in obtaining or processing the permit will not constitute a basis for a claim under this contract.

STATE OF MICHIGAN

Department of Environmental Quality
Land & Water Management Division
P.O. Box 30458
Constitution Hall
Lansing, MI 48909
Telephone: 517-373-7917

1.5 PROJECT/SITE CONDITIONS

1.5.1 Condition and Use of Project Site

The drawings indicate soundings and elevations at the dredging and placement site as found in condition surveys made as stated on the contract drawings. A notification of at least five (5) calendar days shall be given to the Contracting Officer prior to bringing any construction equipment or material upon the work site. The Contractor shall be responsible for damages that may be suffered due to its operations. The Contractor shall note CLAUSE titled "PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS."

1.5.1.1 Physical Conditions

The physical conditions shown on the drawings are indicative of those that prevailed at the time of the site investigations and may be different than those at the time of construction. Significant variations that would require changes to the plans or specification shall be reported to the Contracting Officer immediately.

1.5.2 Waterways Navigation and Traffic

The Contractor shall acquaint itself with all information and regulations pertaining to navigation and vessel traffic within the waterways at the project site. The Contractor shall coordinate with the U.S. Coast Guard to assure that a "NOTICE TO MARINERS" is issued prior to its work activity at the project site. A copy of the requisite notice form is enclosed in SECTION 01999. The completed form shall be sent to the address stated in the Subparagraph entitled "Temporary Lights, Signals and Buoys Required by U.S. Coast Guard". The Government will not undertake to keep the waterways free from vessels or other obstructions, except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army, in accordance with the provisions of Section 7 of the River and Harbor Act approved 8 August 1917 (see Title 33, U.S.C.A. Sec. 1). The Contractor is required to conduct its work in such manner as to obstruct navigation as little as possible and, in case the Contractor's plant so obstructs a channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon completion of the work, the Contractor shall promptly remove its plant, including ranges, buoys, piles, and other marks placed by it under the contract in navigable waters or on shore.

1.5.2.1 Navigation

Information and regulations pertaining to navigation may be obtained from the current issue of the "UNITED STATES COAST PILOT 6," issued annually by the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA). The "UNITED STATES COAST PILOT" may be obtained from National Ocean Survey, NOAA, Distribution Division-C44, Riverdale, Maryland 20840.

1.5.2.2 Traffic

Vessels that may use the waterways at the project site consist of recreational craft and commercial vessels. This traffic may interfere with contract operations and the Contractor shall conduct its work with due regard to and in coordination with the requirements of all navigation. Information regarding the types and amount of passages made by commercial vessels that may use the waterways at the project site may be obtained from the current issue of the "Waterborne Commerce of the United States, Part 3, Waterways and Harbors, Great Lakes," published by the Department of Army, Corps of Engineers. The Department of the Army publication may be obtained at no charge from the following:

District Engineer, U.S. Army Engineer District, New Orleans, Waterborne Commerce Section, P.O. Box 60267, New Orleans, Louisiana 70160. Phone 504-862-1425, FAX 504-862-1091.

1.5.3 Existing Vegetation, Structures, Equipment, Utilities & Improvements

General locations of applicable existing utilities, vegetation, structures, equipment and improvements, based upon latest information available to the Government have been shown on the drawings. However, it is the Contractor's obligation to establish the exact horizontal and vertical location and size of all existing utility lines which are located within the required work area. The Contractor shall submit a utility location plan for approval by the Contracting Officer, locating existing utilities and a copy of its findings prior to commencing work on the site. Any utility lines which are not found by the Contractor, but which are known to exist at the project site, shall be reported to the Contracting Officer immediately. The Contracting Officer will have the option of directing commencement of work at the site or requiring the Contractor to submit further plans for locating the utility lines. Once the utilities have been located and marked, the Contractor shall be deemed to have the location made known to it pursuant to CLAUSE titled "PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS." The Contractor is required under CLAUSE titled "PERMITS AND RESPONSIBILITIES" to comply with, but not limited to, the Michigan Protection of Facilities During Construction Activities Act. If the Contractor damages any existing utility line, vegetation, structure, equipment or improvement, a report thereof shall be made immediately to the Contracting Officer. In any event, existing utility lines, vegetation, structures, equipment or improvements shall be protected from damage, and if damaged, shall be repaired by the Contractor at its own expense.

1.5.4 Identification of Employees

The Contractor shall be responsible for requiring each employee engaged on the work to wear a hardhat of a distinctive color to identify that the person is an employee of the Contractor or display such identification as may be approved.

1.5.5 Contractor-Furnished Utility Services

The Contractor shall furnish, at its own expense, all water, electric current and other utilities required for its use.

1.5.6 Contract Supervision and Representation

The Contractor's local representative shall be available to Government representatives during duty hours, 8 a.m. to 4:30 p.m., on normal working days and shall be available by telephone at other times. The name of the Contractor's representative and the contact telephone number shall be furnished to the Government. In addition the Contractor shall furnish electronic means by which Governments Representative can contact dredge at all times during actual working operations.

1.5.7 Temporary Lights, Signals and Buoys Required by Coast Guard

All temporary lights, signals and buoys required by the U.S. Coast Guard must be displayed during the required work. Information regarding required signals, lights, buoys and other requirements may be obtained from the Commander (OAN), U.S. Coast Guard, Shore Maintenance Detachment, ATTENTION: Aids to Navigation Branch, 1240 East Ninth Street, Cleveland, Ohio 44199-2060, Telephone (216) 522-3990.

1.5.8 Navigation Buoys

1.5.8.1 Buoy Relocation Plan

If the relocation of existing navigation buoys is required to perform the contract work, the Contractor shall request permission for their relocation from the U.S. Coast Guard through the Contracting Officer. The request shall be provided to the Contracting Officer not less than three (3) weeks prior to need of the buoy relocation. The Contractor shall be responsible for performing the relocation work, which shall be in accordance with U.S. Coast Guard requirements.

1.5.8.2 Temporary Dredging and Construction Buoys

In order to distinguish temporary buoys placed and maintained by the Contractor for dredging or construction purposes from aids to navigation placed by the U.S. Coast Guard, the Contractor's buoys shall be white and the top two (2) feet shall be light green in color. The Contractor shall remove its temporary buoys at the completion of the work.

1.5.8.3 Buoy Markings

If buoys with special markings are needed to indicate the different sides of the navigable channel, prior arrangements shall be made with the U.S. Coast Guard, through the Contracting Officer.

1.5.9 Layout of Work and Surveys

1.5.9.1 Layout of Work

The following requirements are in addition to the requirements of CLAUSE titled "LAYOUT OF WORK." The Government has established bench marks and horizontal control points at the site of the work. Horizontal control points and descriptions of bench marks are shown on the drawings and on sheets enclosed in SECTION 01999. The elevations of bench marks are referred to IGLD 1985.

1.5.9.2 Surveyor Requirements

Prior to any survey work by the Contractor he shall submit his Survey Note

Format showing in detail how he plans on taking survey notes in the field for the approval of the Contracting Officer. From these control points and bench marks, the Contractor shall lay out the work by establishing all lines, grades, range markers and gauges at the site as necessary to control the work. All survey information shall be recorded in accordance with standard and approved methods and in the format approved by the Contracting Officer. All field notes, sketches, recordings and computations made by the Contractor in performing the layout work shall be available at all times during the progress of the work for ready examination by the Contracting Officer or his or her duly authorized representative and upon completion of the contract work the originals shall be turned over to the Contracting Officer in ring binders.

1.5.9.3 Suspension

The Contracting Officer may require that work be suspended at any time when location and limit marks established by the Contractor are not reasonably adequate to permit checking the work. Such suspension will be withdrawn upon satisfactory replacement of location and limit marks. Such suspension shall be at no additional cost to the Government and shall not entitle the Contractor to an extension of time for completing the work.

1.6 SEQUENCING AND SCHEDULING

1.6.1 Exclusion of Period in Computing Completion Schedules

No work will be required during the period between 01 December and 01 May, inclusive and the days in this period will not be counted when computing the required completion date. The Contractor may perform work, unless otherwise prohibited, during all or any part of this period upon giving prior written notice to the Contracting Officer.

1.6.2 Dredging Period Restriction

The Contractor's attention is directed to the allowed and prohibited dredging periods as established by the State of Michigan for this project as specified in SECTION 01130, "ENVIRONMENTAL PROTECTION" Paragraph, "PROTECTION OF ENVIRONMENTAL RESOURCES", Subparagraph, "State of Michigan - Allowed and Prohibited Dredging". The number of calendar days within which the Contractor is required to complete the work under this contract, as established in Clause titled "COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK", is exclusive of the above referenced periods during which dredging is prohibited and the days in these periods will not be counted when computing the required completion date.

1.6.3 Sunday, Holiday And Night Operations

When the Contractor elects to work on Sundays, holidays or nights (when not prohibited herein), notice of its intention to do so shall be given to the Contracting Officer not less than forty-eight (48) hours in advance thereof. NIGHT WORK IS PROHIBITED.

1.6.3.1 Work Period Restrictions

No work is allowed at the project sites during the following periods:

a. Holiday periods as follows:

(2) 6 p.m. 1 July to 6 a.m. 5 July 2005

(3) 6 p.m. 2 September to 6 a.m. 6 September 2005

The above-stated no-work periods, as applicable, are included in the number of calendar days within which the Contractor is required to complete the work as established in CLAUSE titled "COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK", and therefore the above-stated no-work periods will not entitle the Contractor to additional time for completion of the work.

1.6.4 Start Work

Evidence that the Contractor has started mobilization and preparation of submittal register, and other preparatory work will satisfy the requirement that work commence within ten (10) calendar days after receipt of Notice to Proceed. (See Clause titled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK, FAR 52.212-0003.)

1.7 PRESERVATION OF HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

If, during construction activities, the Contractor observes items that may have archaeological, historical or cultural value, such observations shall be reported immediately to the Contracting Officer so that the appropriate authorities may be notified and a determination can be made as to their significance and what, if any, special disposition of the funds should be made. The Contractor shall cease all activities that may result in the destruction of these resources and shall prevent its employees from trespassing on, removing, or otherwise damaging such resources.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01101

REAL ESTATE

-- End of Section Table of Contents --

SECTION 01101

REAL ESTATE

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL PROCEDURES":

SD-18 Records

Additional Real Estate Rights; G,RED

Copies of any agreements for Contractor-acquired real estate rights shall be furnished before entering thereon.

1.1.1 REGULATORY REQUIREMENTS

1.1.2 Real Estate Rights

Rights for the use of the placement area have been obtained and the general limits of the areas are shown on the drawings. All real estate lake ward of the Ordinary High Water Mark (Elevation 581.5 feet) is under Federal jurisdiction and no permit or agreements are necessary for work therein except as specified in SECTION 01100, "SPECIAL PROJECT PROCEDURES", Paragraph, "Additional Work Proposed and Not Authorized". No other real estate rights have been obtained by the Government for this project.

1.1.3 Additional Real Estate Rights

Any additional real estate rights desired by the Contractor shall be obtained by the Contractor at its own expense. Such agreements shall clearly relieve the Government of any responsibility for damages or liability resulting from the Contractor's use of such grounds.

1.2 PROJECT/SITE CONDITIONS

1.2.1 Location and Verification

It shall be the Contractor's responsibility to accurately locate the limits of all lands utilized under the contract. The corner and angle points of each area for which rights have been obtained shall be marked with semipermanent markers except where there is an approved existing property marker. Temporary markers shall be placed at points on alignment. The points on alignment shall be marked at stations so that intervals between points do not exceed 200 feet.

1.2.2 Survey Markers

All markers shall be installed in an area prior to its use and they shall be available for reference during and upon completion of use of the area. Where approved existing property markers are found, a witness stake, as

specified in Subparagraph, "Semipermanent Markers" below, shall be provided. If the types of markers specified hereinafter cannot be used, other types, as approved by the Contracting Officer, shall be provided.

1.2.2.1 Semipermanent Markers

The markers shall be a steel rod one-half inch in diameter and four (4) feet long. The steel rod shall be driven vertically into the ground so that the top is flush with the finished ground surface. Each marker shall be witnessed by a 2" x 2" yellow stake extending two (2) feet above the ground surface and driven into the ground until stable, with not less than one (1) foot penetration.

1.2.2.2 Temporary Markers

Markers shall be 2" x 2", red-colored, wood hub stakes driven into the ground until stable (not less than one (1) foot penetration) with two (2) feet projecting above the ground surface. If the period in which temporary markers are to be in place exceeds one (1) construction season, a more permanent type of marker, as approved, shall be provided.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01130

ENVIRONMENTAL PROTECTION

-- End of Section Table of Contents --

SECTION 01130

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

40 CFR 261	Identification and listing of Hazardous Waste

ENGINEERING MANUALS (EM)

EM 385-1-1	(1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

MDOT 1996	(1996) Standard Specifications for Construction

1.2 DEFINITIONS

Environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare; unfavorably alter ecological balances of plant or animal communities; or degrade the environment from an aesthetic, cultural or historic perspective. Environmental protection is the prevention/control of pollution and habitat disruption that may occur during construction. The control of environmental pollution and damage requires consideration of air, water, land, biological and cultural resources; (archaeological and historical resources) and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive materials; and other pollutants.

1.3 SUBMITTALS

Government approval is required for all submittals with a "G" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Environmental Protection Plan; G-AOF

Submit in writing an Environmental Protection Plan within ten (10) calendar days after receipt of the Notice To Proceed. See Article titled ENVIRONMENTAL PROTECTION PLAN for details. Information on existing environmental documents pertaining to the project may be obtained by

contacting the Environmental Analysis Branch, Detroit District, U.S. Army Corps of Engineers, 477 Michigan Avenue, Detroit, MI. 48226.

1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

The Contractor shall comply with all applicable Federal, State, and local laws, regulations, permits and licenses. The Contractor shall provide environmental protective measures and procedures to prevent and control pollution, limit habitat disruption, and correct environmental damage that occurs during construction.

1.4.1 Protection of Features

This section supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. The Contractor shall prepare a list of features requiring protection under the provisions of the contract clause which are not specially identified on the drawings as environmental features requiring protection. The Contractor shall protect those environmental features, indicated specially on the drawings, in spite of interference which their preservation may cause to the Contractor s work under the contract. The Contractor shall confine its activities to areas defined by contract drawings and specifications.

1.4.2 Environmental Assessment of Contract Deviations

The Contract specifications have been prepared to comply with the special conditions and mitigation measures of an environmental nature which were established during the planning and development of this project. The Contractor is advised that deviations from the drawings or specifications (e.g., proposed alternate borrow areas, disposal areas, staging areas, alternate access routes, etc.) could result in the requirement for the Government to reanalyze the project from an environmental standpoint. Deviations from the construction methods and procedures indicated by the plans and specifications which may have an environmental impact will require a extended review, processing, and approval time by the Government. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact. The preparation of new environmental documents pertaining to the project shall become the responsibility of the Contractor. The Contractor shall obtain any necessary permits or licenses that have not been obtained by the Government.

1.5 ENVIRONMENTAL PROTECTION PLAN

The Contractor shall submit an Environmental Protection Plan for review and acceptance by the Contracting Officer. The Government will consider an interim plan for the first 30 days of operations. However, the Contractor shall furnish an acceptable final plan not later than 30 calendar days after receipt of the Notice to Proceed. Acceptance is conditional and is predicated upon satisfactory performance during construction. The Government reserves the right to require the Contractor to make changes in the Environmental Protection Plan or operations if the Contracting Officer determines that environmental protection requirements are not being met. The plan shall detail the actions which the Contractor shall take to comply with all applicable Federal, State, and local laws and regulations concerning environmental protection and pollution control and abatement, as well as the additional specific requirements of this contract. No physical work at the site shall begin prior to acceptance of the Contractor s plan

or an interim plan covering the work to be performed. The environmental protection plan shall include, but not be limited to, the following:

1.5.1 Federal, State and Local Laws and Regulations

The Contractor shall be knowledgeable of all Federal, State and local environmental laws and regulations which apply to the construction operations under the Contract and shall list any unique requirements applicable to this contract as part of the Environmental Protection Plan.

1.5.2 Spill Control Plan

The Contractor shall include as part of the environmental protection plan, a Spill Control Plan. The plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by the Emergency Response and Community Right-to-Know Act or regulated under State or local laws or regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:

a. The name of the individual who will be responsible for implementing and supervising the containment and cleanup.

b. Training requirements for Contractor's personnel and methods of accomplishing the training.

c. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

d. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.

e. The methods and procedures to be used for expeditious contaminant cleanup.

f. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity spill occurs. The plan shall contain a list of the required reporting channels and telephone numbers.

1.5.3 Recycling and Waste Minimization Plan

The Contractor shall submit a Recycling and Waste Minimization Plan as a part of the Environmental Protection Plan. The plan shall detail the Contractor's actions to comply with the following recycling and waste minimization requirements:

a. The Contractor shall participate in State and local government sponsored recycling programs to reduce the volume of solid waste materials at the source.

1.5.4 Contaminant Prevention Plan

As a part of the Environmental Protection Plan, the Contractor shall prepare a contaminant prevention statement identifying potentially hazardous substances to be used on the job site and intended actions to prevent accidental or intentional introduction of such materials into the air, water, or ground. The Contractor shall detail provisions to be taken to meet Federal, State, and local laws and regulations regarding the storage and handling of these materials.

1.5.5 Environmental Monitoring

The Contractor shall include in the plan the details of environmental monitoring requirements under the laws and regulations and a description of how this monitoring will be accomplished. All environmental monitoring shall include monitoring of construction effects on "lands and water, air resources" and that the "effect to be monitored includes noise and vibration".

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 SPECIAL ENVIRONMENTAL PROTECTION REQUIREMENTS

3.1.1 Tree Protection

No ropes, cables, or guys shall be fastened to or attached to any tree(s) for anchorage unless specifically authorized by the Contracting Officer. Where such special use is permitted, the Contractor shall provide effective protection to prevent damage to the tree and other land and vegetative resources. Unless specifically authorized by the Contracting Officer, no construction equipment or materials shall be placed or used within the drip line of trees shown on the drawings to be saved. No excavation or fill shall be permitted within the drip line of trees to be saved except as shown on the drawings.

3.1.2 Location of Field Offices, Storage & Other Contractor Facilities

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in area provided by the Contractor. Temporary placement or relocation of Contractor facilities shall be made only on approval by the Contracting Officer.

3.1.3 Protection of Fish, Wildlife and Flora

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish, wildlife and flora. Species that require specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations. See Subparagraph, "Environmental Protection Plan."

3.1.4 U.S. Department of Agriculture (USDA) Quarantined Considerations

The Contractor shall thoroughly clean all construction equipment at the prior job site in a manner that ensures all residual soil is removed and that egg deposits from plant pests are not present. The Contractor shall consult with the USDA Plant Protection and Quarantine (USDA - PPQ)

jurisdictional office for additional cleaning requirements that may be necessary.

3.1.5 Control of Non-Indigenous Aquatic Nuisance Species

The Contractor shall conduct diligent watercraft operating practices to prevent the spread of Aquatic Nuisance Species (ANS). Such practices shall include, but not be limited to, cleaning equipment on-site to prevent the spread of seeds, eggs, larvae, or other dispersal vectors (e.g. do not transport soil and plant matter from one location to another); and discharging or exchanging ballast water or other water from a vessel of any type only at a location where chances for survival of ANS are minimal, such as at cold, deep regions of the Great Lakes which are far from shore.

3.1.6 Soil Disposal Areas on Government Property

Material disposal on Government property shall be disposed only in those areas designated on the contract drawings. Hazardous, toxic, and radiological wastes (HTRW) shall not be disposed of on Government property. Disposal operations shall be managed and controlled to prevent erosion of soil or sediment from entering nearby waters or wetlands. Disposal operations shall be developed and managed in accordance with the grading plan shown on the drawings or as approved by the Contracting Officer.

3.1.7 Disposal of Solid Wastes

Solid waste is rubbish, debris, waste materials, garbage, and other discarded solid materials (excluding clearing debris and hazardous waste as defined in following paragraphs). Solid waste shall be placed in containers and disposed on a regular schedule. All handling and disposal shall be conducted in such a way as to prevent spillage and contamination.

3.1.8 Protection of Land

3.1.8.1 Work Area Limits

Prior to any construction the Contractor shall mark where work is to be performed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, the markers shall be visible during darkness, The Contractor shall convey to its personnel the purpose of marking and/or protection of all necessary objects.

3.1.8.2 Protection of Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features to be preserved, indicated and defined on the drawings submitted by the Contractor as a part of the Environmental Protection Plan shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

3.1.8.3 Disposal of Chemical Waste

Chemical waste shall be stored in corrosion resistant containers, removed from the work area and disposed of in accordance with Federal, State, and local laws and regulations.

3.1.8.4 Spillages

Special measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, ashes, sawdust, waste washings, herbicides and insecticides, rubbish or sewage, and other pollutants from entering public waters.

3.1.8.5 Hydrocarbons, Carbon Monoxide and Oxides of Nitrogen and Sulfur Oxides

Vapor/gaseous emissions of hydrocarbons, carbon monoxide, oxides of nitrogen and sulfur oxides from equipment shall be controlled to Federal and State allowable limits at all times.

3.1.8.6 Odors

Odors from construction activities, processing and preparation of materials shall be controlled at all times.

3.1.8.7 Protection from Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize damage to the environment by noise.

3.1.9 Clearing Debris

Clearing debris is trees, tree stumps, tree trimmings, and shrubs, and leaves, vegetative matter, excavated natural materials (e.g., dirt, sand, and rock), and demolition products (e.g., brick, concrete, glass, and metals).

a. The Contractor shall collect trees, tree stumps, tree trimmings, shrubs, leaves, and other vegetative matter; and shall transport from Government property for proper disposal and/or recycling in compliance with Federal, State, and local requirements. The Contractor shall segregate the matter where appropriate for proper disposal. Untreated and unpainted scrap lumber may be disposed of with this debris where appropriate.

b. Excavated natural materials shall be placed in the designated area on the drawings.

c. Demolition products shall be transported from Government property for proper disposal and/or recycling in compliance with Federal, State, and local requirements.

3.1.10 Disposal of Contractor Generated Hazardous Wastes

Hazardous wastes are hazardous substances as defined in 40 CFR 261, or as defined by applicable State and local regulations. Hazardous waste generated by construction activities shall be removed from the work area and be disposed in compliance with Federal, State, and local requirements. The Contractor shall segregate hazardous waste from other materials and wastes, and shall protect it from the weather by placing it in a safe covered location; precautionary measures against accidental spillage such as berming or other appropriate measures shall be taken. Hazardous waste shall be removed from Government property within 60 days. Hazardous waste shall not be dumped onto the ground, into storm sewers or open water courses, or into the sanitary sewer system.

3.1.11 Fuels and Lubricants

Fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation. Lubricants and waste oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with Federal, State, and local laws and regulations.

3.2 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

3.2.1 Discovered Historic, Archaeological, and Cultural Resources

If during construction activities, items are observed that may have historic or archaeological value or artifacts are discovered, such items shall be protected in place and the observations shall be reported immediately to the Contracting Officer so that the District Archaeologist may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall prevent its employees from trespassing on, removing, or otherwise disturbing such resources.

3.3 PROTECTION OF WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

3.4 PROTECTION OF FISH AND WILDLIFE RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish, wildlife and flora. Species that required specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations. See Subparagraph, "Environmental Protection Plan."

3.4.1 State of Michigan - Allowed and Prohibited Dredging

During the following periods of the year dredging is allowed:

Harbor	Allowed Periods:
Caseville Harbor	01 July through 31 March

Dredging is prohibited during any other periods.

3.4.2 Particulates

Airborne particulates, including dust particles, aerosols, and gaseous by products from construction activities and processing and preparation of materials shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, disposal sites, borrow areas, and all other work areas free from airborne dust which would cause a hazard or nuisance.

3.5 INSPECTION

If the Contracting Officer notifies the Contractor in writing of any

observed noncompliance with contract requirements or Federal, State, or local laws, regulations, or permits, the Contractor shall inform the Contracting Officer of proposed corrective action and take such action to correct the noncompliance. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action is taken. No time extensions will be granted or costs or damages allowed to the Contractor for any such suspension.

3.6 MAINTENANCE OF POLLUTION CONTROL FACILITIES

The Contractor shall maintain all constructed pollution control facilities and portable pollution control devices for the duration of the Contract or for the length of time construction activities create the particular pollutant.

3.7 TRAINING OF CONTRACTOR PERSONNEL

Contractor personnel shall be trained in environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel monthly. The training and meeting agenda shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, installation and care of facilities (vegetative covers, etc.), and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control. Anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants, shall also be discussed. Other items that must be discussed shall include recognition and protection of Archaeological sites and artifacts and historic structures.

3.8 POST CONSTRUCTION CLEANUP OR OBLITERATION

The Contractor shall obliterate all signs of temporary facilities such as haul roads, work area, structures, stock piles of excess or waste materials, fencing, buoys, stakes, or other vestiges of construction within the work, storage and access areas or as directed by the Contracting Officer. Except for surfaced areas, the areas shall be restored to near natural conditions which permit the growth of vegetation thereon. In areas where restoration to near natural conditions is not required, surfaces shall be evenly and smoothly dressed, sloped to drain, and the edges of the restored area graded to be flush with the surrounding existing grade even if original contours are not restored. All damaged non-surfaced areas shall be restored by topsoiling, fertilizing, seeding and mulching, unless otherwise specified or directed. The topsoiling, fertilizing, seeding, and mulching shall be in accordance with the applicable provisions of MDOT 1996.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01312A

QUALITY CONTROL SYSTEM (QCS)

-- End of Section Table of Contents --

SECTION 01312A

QUALITY CONTROL SYSTEM (QCS)

1.1 GENERAL

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

Administration
Finances
Quality Control
Submittal Monitoring
Scheduling
Import/Export of Data

1.1.1 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

1.1.2 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01320A, PROJECT SCHEDULE, Section 01330, SUBMITTAL PROCEDURES, and Section 01451A, CONTRACTOR QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor shall be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

1.3 SYSTEM REQUIREMENTS

The following listed hardware and software is the minimum system configuration that the Contractor shall have to run QCS:

Hardware

IBM-compatible PC with 500 MHz Pentium or higher processor

128+ MB RAM for work station/ 256+MB RAM for server.

4 GB hard drive disk space for sole use by the QCS system

3 1/2 inch high-density floppy drive

Compact disk (CD) Reader 8X speed or higher

SVGA or higher resolution monitor (1024X768, 256 colors)

Mouse or other pointing device.

Windows compatible printer. (Laser printer must have 4 MB+ of RAM)

Connection to the Internet, minimum 256k BPS

Software

MS Windows 98, ME, NT, or 2000

Word Processing software compatible with MS Word 97 or newer

Latest version of; Navigator, Microsoft Internet Explorer, or other browser that supports HTML 4.0 or higher

The Contractor's computer system shall be protected by virus protection software that is regularly upgraded with all issued manufacturer's updates throughout the life of the contract.

Electronic mail (E-mail) MAPI compatible.

1.4 RELATED INFORMATION

1.4.1 QCS User Guide

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

1.4.2 Contractor Quality Control(CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). The QCS database typically shall include current data on the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

1.6.1.2 Subcontractor Information

The database shall contain the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

1.6.1.3 Correspondence

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

1.6.1.4 Equipment

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective

of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

1.6.2 Finances

1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

1.6.2.2 Payment Requests

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. A signed paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01451A, CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by Section 01451A, CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies

identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

1.6.3.3 Three-Phase Control Meetings

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

1.6.3.4 Accident/Safety Tracking.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 200.

1.6.3.5 Features of Work

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

1.6.3.6 QC Requirements

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work progresses, and shall promptly provide this information to the Government via QCS.

1.6.4 Submittal Management

The Government will provide the initial submittal register, ENG Form 4288, SUBMITTAL REGISTER, in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update, ENG Form 4288, shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

1.6.5 Schedule

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Contract Clause "Schedules for Construction Contracts", or Section 01320A, PROJECT SCHEDULE, as applicable. This schedule shall be input and maintained in the QCS database either manually

or by using the Standard Data Exchange Format (SDEF) (see Section 01320A PROJECT SCHEDULE). The updated schedule data shall be included with each pay request submitted by the Contractor.

1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be

returned. The Government will not process progress payments until an acceptable QCS export file is received.

1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01330

SUBMITTAL PROCEDURES

-- End of Section Table of Contents --

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

1.1.1 Government-Furnished Information

Submittal register will be delivered to the contractor, by contracting officer on 3 1/2 inch disk. Register will have the following fields completed, to the extent that will be required by the Government during subsequent usage.

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD No. and type, e.g. SD-04 Drawings) required in each specification section.

Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.

Column (f): Indicate approving authority for each submittal. A "G" indicates approval by contracting officer; a blank indicates approval by QC manager.

1.2 DEFINITIONS

1.2 Submittal

Shop drawings, product data, samples, and administrative submittals presented for review and approval. Contract Clauses "FAR 52.236-5, Material and Workmanship," paragraph (b) and "FAR 52.236-21, Specifications and Drawings for Construction," paragraphs (d), (e), and (f) apply to all "submittals."

1.3 Types of Submittals

All submittals are classified as indicated in paragraph "Submittal Descriptions (SD)". Submittals also are grouped as follows:

a. Shop drawings: As used in this section, drawings, schedules, diagrams, and other data prepared specifically for this contract, by contractor or through contractor by way of subcontractor, manufacturer, supplier, distributor, or other lower tier contractor, to illustrate portion of work.

b. Product data: Preprinted material such as illustrations, standard schedules, performance charts, instructions, brochures, diagrams, manufacturer's descriptive literature, catalog data, and other data to illustrate portion of work, but not prepared exclusively for this contract.

c. Samples: Physical examples of products, materials, equipment, assemblies, or workmanship that are physically identical to portion of work, illustrating portion of work or establishing standards for evaluating appearance of finished work or both.

d. Administrative submittals: Data presented for reviews and approval to ensure that administrative requirements of project are adequately met but not to ensure directly that work is in accordance with design concept and in compliance with contract documents.

1.4 Submittal Descriptions (SD)

SD-01 Preconstruction Submittals

Certificates of insurance

Surety bonds

List of proposed subcontractors

List of proposed products

Construction Progress Schedule

Submittal schedule

Schedule of values

Health and safety plan

Work plan

Quality control plan

Environmental protection plan

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports

Daily checklists

Final acceptance test and operational test procedure

SD-07 Certificates

Statements signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a supplier, installer or subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

1.5 SUBMITTAL CLASSIFICATION

Submittals are identified with submittal description (SD) numbers and are classified as follows:

1.5.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.5.2 Designated Reviewers

The organization designated to perform the review for approval for items requiring Government approval (G) is identified by acronym in the REVIEWER column on the SUBMITTAL REGISTER, ENG FORM 4288 or ENG FORM 4288 (RMS). Following is a list of the acronyms used and their full description:

AOF = The Resident U.S. Army Corps of Engineers Area Office

RED = Real Estate Division, Detroit District, U.S. Army Corps of Engineers

ECD = Engineering and Construction Division, Detroit District, U.S. Army Corps of Engineers

1.6 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.7 DISAPPROVED SUBMITTALS

When a submittal is returned to the Contractor and marked "DISAPPROVED" or "APPROVED AS NOTED, REVISE AND RESUBMIT", the Contractor shall make all

corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.8 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Submittals shall be made in the required number of copies and to the applicable Area Office. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and stamped in accordance with ARTICLE titled STAMPS, and approved by the CQC representative. Each respective transmittal form (ENG FORM 4025) shall be signed and dated by the CQC representative certifying that the accompanying submittal complies with the contract requirements. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

3.2 SUBMITTAL REGISTER (ENG FORM 4288)

In Section 01999, is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor will also be given the submittal register as a diskette containing the computerized ENG Form 4288 and instructions on the use of the diskette. Columns "d" through "r" have been completed by the Government; the Contractor shall complete columns "a" and "s" through "u" and submit the forms (hard copy plus associated electronic file) to the Contracting Officer for approval within 10 calendar days after receipt of the Notice to Proceed. The Contractor shall keep this diskette up-to-date and shall submit it to the Government together with the monthly payment request. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated.

3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 10 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 5 calendar days shall be allowed and shown on the register for review and approval of submittals for refrigeration and HVAC control systems.

3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) enclosed in SECTION 01999 shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor, or may be copied from the enclosed form. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

3.5.1 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control its procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. The distribution of approved copies will be as specified in the Clause titled "SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION".

3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals.

3.9 RESERVATION OF RIGHTS

The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the

Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

3.10 STAMPS

Stamps, approximately 2 inches high by 3 inches wide, and similar to the following, shall be used by the Contractor on the submittal data to validate approval:

CONTRACTOR

(Firm Name)

_____ Approved

_____ Approved with corrections as noted on submittal data and/or attached sheets(s).

SIGNATURE: _____

TITLE: _____

DATE: _____

3.11 ACCIDENT PREVENTION PLAN

The format of the Contractor's Accident Prevention Plan shall be in accordance with APPENDIX A, MINIMUM BASIC OUTLINE FOR ACCIDENT PREVENTION PLAN of the SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385 1-1, 3 Sept 1996. A copy of NCE FORM 129 is included in SECTION 01999 for use in preparing activity hazard analysis documentation.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01451

CONTRACTOR QUALITY CONTROL

-- End of Section Table of Contents --

SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for all submittals with a "G" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Quality Control Plan; G-AOF

Submit in writing a Quality Control Plan within thirty (30) calendar days after receipt of Notice to Proceed.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with Clause titled "INSPECTION OF CONSTRUCTION." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both on-site and off-site, and shall be keyed to the proposed construction sequence.

3.2 QUALITY CONTROL PLAN

3.2.1 General

The Contractor shall furnish for review by the Government, not later than 10 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of Clause titled "INSPECTION OF CONSTRUCTION." The plan shall identify personnel, procedures, control, instructions, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.2 Content of the CQC Plan

The CQC plan shall include, as a minimum, the following to cover all construction operations, both on-site and off-site, including work by

subcontractors:

a. Information required in the paragraph titled "IMPLEMENTATION OF GOVERNMENT RESIDENT MANAGEMENT SYSTEM (RMS)" shall be incorporated into the Contractor's Quality Control plan, as applicable.

b. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC system manager who shall report to the project superintend.

c. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.

d. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities and responsibilities. Copies of these letters shall also be furnished to the Government.

e. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors. These procedures shall be in accordance with SECTION 01330, "SUBMITTAL PROCEDURES".

f. Procedures for tracking preparatory, initial, and follow-up control phases, including documentation.

g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements. This list shall be as agreed upon during the coordination meeting.

3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in its CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.4 Changes to Plan

After acceptance of the QC plan, the Contractor shall submit any proposed QC plan changes to the Contracting Officer in writing a minimum of 7 calendar days prior to the proposed implementation date for the change. Changes to the plan shall not be made prior to the Contracting Officer's

approval of the change.

3.3 COORDINATION MEETING

Immediately after adjournment of the required Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the Quality Control Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. A draft copy of the CQC Plan shall be provided to the Government at least three working days prior to the CQC meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, administration of the system for both on-site and off-site work, and the interrelationship of the Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the Government and are to be signed by both the Contractor and the Contracting Officer or the Contracting Officer's Representative. The minutes shall be separate from the Preconstruction Conference minutes and shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.3.1 Finalize CQC Plan

Immediately following the Preconstruction Conference, the Contractor shall finalize the CQC plan, taking into account comments made at the conference, and shall formally submit the CQC plan for acceptance. The Contractor shall allow up to 10 calendar days for review and acceptance of the finalized submittal.

3.4 QUALITY CONTROL ORGANIZATION

The requirements for the CQC organization are, a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

3.4.1 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the on site work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. This CQC System Manager shall be a construction person with a minimum of 3 years in related work. This CQC system manager shall be on site at all times during construction and shall be employed by the prime Contractor The CQC System Manager shall be assigned as System Manager but may have duties as project superintendent in addition to quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.2 Additional Requirements

In addition to the above experience and education requirements the CQC System Manager shall have completed the course titled "Construction Quality Management For Contractors". This course is periodically offered at one or

more of the Area Offices within the District.

3.4.3 Organizational Changes

The Contractor shall obtain Contracting Officer's acceptance before replacing any member of the CQC staff. Requests shall include the names, qualifications, duties, and responsibilities of each proposed replacement.

3.5 SUBMITTALS

Submittals shall be as specified in SECTION 01330 "SUBMITTAL PROCEDURES". The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors, complies with the requirements of the contract. The controls shall be adequate to cover all construction operations and will be keyed to the proposed construction sequence. The controls shall include at least three phases of control to be conducted by the CQC system manager for all definable features of work, as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work and shall include:

a. A review of each paragraph of applicable specifications.

b. A review of the contract plans.

c. A check to assure that all required submissions have been made and approved.

d. A check to assure that provisions have been made to provide required control inspection.

e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

f. A review of the appropriate activity hazard analysis to assure safety requirements are met.

g. Discussion of procedures for constructing the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that phase of work.

h. A check to ensure that the CQC plan for the work to be performed has been accepted by the Contracting Officer.

i. The Government shall be notified at least 24 hours in advance of beginning any of the required action of the preparatory phase. This phase shall include a meeting conducted by the CQC system manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by a completed

Preparatory Inspection Checklist and by separate minutes prepared by the CQC system manager and attached to the daily QC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract requirements.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

a. A check of preliminary work to ensure that it is in compliance with contract requirements. Review minutes of the preparatory meeting.

b. Verification of full contract compliance. Verify required control inspection.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards.

d. Resolve all differences.

e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.

f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. A completed Initial Inspection Checklist of this phase shall be prepared by the CQC system manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

g. The initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure continuing compliance with contract requirements until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work.

3.6.4 Implementation of Government Resident Management System (RMS)

The Contractor shall utilize the Government-furnished CQC Management Report, NCE Form 63 for its daily reports. (Copy enclosed in SECTION 01999). Other Contractor desired reporting forms may be used in addition to this form. The Contractor shall use a government-furnished RMS CQC computer module for managing the quality control for this project. On the Government-furnished Input Forms in SECTION 01999 for use with the RMS, the Contractor shall provide the following information:

(1) Prime Contractor staffing

(2) letter codes which the Contractor wishes to use in addition to those supplied with the program libraries. A list of current existing codes is provided in SECTION 01999.

(3) subcontractor information showing trade, name, address, and insurance expiration dates

(4) Definable features of work from a Government provided dictionary (may be expanded by the Contractor, as approved).

(5) Pay activity and activity information, including minimum and maximum durations for each activity on a separate listing. The sum of all activity values shall equal the contract amount and, all Bid Items and Additives shall be separately identified, in accordance with the BIDDING SCHEDULE. Bid Items may include multiple activities, but activities may only be assigned to one such Bid Item. All of the data listed in this Subpart 6 shall be provided and the RMS CQC module shall be completed to the satisfaction of the Contracting Officer prior to any contract payments (except payments for bonds, insurance and/or mobilization as approved by the Contracting Officer) and shall be updated as required.

(6) Required Quality Control tests (as applicable) tied to individual activities. The QC Reports/QC Requirements function of the RMS QC Module will be used to meet the requirements for tracking of verification and acceptance testing specified in the paragraph titled "Content of the CQC Plan".

(7) Submittal information relating to specification section, bid item number, description, activity number, review period and expected procurement period

(8) User schooling information (as applicable).

The above items shall be incorporated into the required submittal for the Contractor's Quality Control Plan required in the paragraph titled "QUALITY CONTROL PLAN" of this Section.

a. During the course of the contract, the Contractor will receive various Quality Assurance comments from the Government that will reflect corrections needed to Contractor activities or reflect outstanding or future items needing the attention of the Contractor. The Contractor shall acknowledge receipt of these comments by specific number reference on its Daily CQC Report, and will also reflect on his Daily CQC Report when these items are specifically completed or corrected to permit Government verification. The contractor will use the QC COMMENTS function of the RMS QC Module to meet the requirements for tracking construction deficiencies as specified in paragraph titled, "Content of the CQC Plan".

b. The Contractor's schedule system shall include, as specified and separate activities, all Preparatory Phase Meetings (inspections); all O&M Manuals (as applicable) and all Test Plans of Electrical and Mechanical Equipment or Systems that require validation testing or instructions to Contracting Officer Representatives (as applicable).

3.6.5 Additional Preparatory and Initial Phases

Additional preparatory and initial phases may be conducted on the same definable features of work as determined by the Government if the quality of on-going work is unacceptable; or if there are changes in the applicable

QC staff or in the on-site production supervision or work crew; or if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

3.7 DOCUMENTATION

The Contractor shall maintain Daily Inspection Report of quality control operations, activities, and tests performed, including the work of subcontractors. These records shall be on an acceptable form and shall include factual evidence that required quality control activities and/or tests have been performed, including but not limited to the following:

a. Contractor/subcontractor and their area of responsibility.

b. Operating plant/equipment with hours worked, idle, or down for repair.

c. Work performed today, giving location, description, and by whom. For dredging projects, the report shall always include the character and types of materials removed. Whenever there is a significant change in the materials, the location of such change shall be included in the reports.

d. Control activities performed with results and references to specifications/plan requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.

e. Identify submittals reviewed, with contract reference, by whom, and action taken.

f. Off-site surveillance activities, including actions taken.

g. Job safety evaluations stating what was checked, results, and instructions or corrective actions.

h. List instructions given/received and conflicts in plans and/or specifications.

i. Contractor's verification statement.

j. These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that the workmanship complies with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date(s) covered by the report, except that reports need not be submitted for days on which no work is performed. All calendar days shall be accounted for throughout the life of the contract. The first report following a period of no work shall be for that day and all the no-work days since the last reported work day. Reports shall be sequentially numbered for this project, signed and dated by the CQC system manager. The report from the CQC system manager shall include copies of reports prepared by all subordinate quality control personnel.

3.8 SAMPLE FORMS

Sample forms for the CQC Management Report, Preparatory Inspection Checklist, Initial Inspection Checklist, and other required reports and plans are enclosed in SECTION 01999. The Contractor shall tailor the checklists to include all reporting and quality control requirements specific to this project.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor or subcontractor.

--End of Section--

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01525

SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS

-- End of Section Table of Contents --

SECTION 01525

SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z359.1	(1999) Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components

ASME INTERNATIONAL (ASME)

ASME B30.5	(2000) Mobile and Locomotive Cranes
ASME B30.8	(2000) Floating Cranes and Floating Derricks
ASME B30.22	(2000) Articulating Boom Cranes

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR 1910	Safety and Health Regulation in General Industry
29 CFR 1910.94	Ventilation
29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
29 CFR 1910.146	Permit-required Confined Spaces
29 CFR 1915	Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment
29 CFR 1926	Safety and Health Regulations for Construction
29 CFR 1926.62	Lead in Construction
29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
29 CFR 1926.450	Scaffolds
29 CFR 1926.500	Fall Protection
29 CFR 1926.1101	Asbestos

U. S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (1996) Safety and Health Requirements Manual

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Site Safety & Health Officer Qualification (SSHO); G-AOF

Accident Prevention Plan (APP); G-AOF

Activity Hazard Analysis (AHA); G-AOF

SD-06 Test Reports

Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports."

Accident Reports

Monthly Exposure Reports

Regulatory Citations and Violations]

SD-07 Certificates

Confined Space Entry Permit

Submit one copy of each permit attached to each Daily Quality Control Report.

1.3 DEFINITIONS

a. High Visibility Accident. Any mishap which may generate publicity and/or high visibility.

b. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.

c. Multi-Employer Work Site (MEWS). A multi-employer work site, as defined by OSHA, is one in which many employers occupy the same site. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors.

d. Recordable Injuries or Illnesses. Any work-related injury or

illness that results in:

(1) Death, regardless of the time between the injury and death, or the length of the illness;

(2) Days away from work;

(3) Restricted work;

(4) Transfer to another job;

(5) Medical treatment beyond first aid;

(6) Loss of consciousness; or

(7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.

e. "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.

f. Site Safety and Health Officer (SSHO). The qualified or competent person who is responsible for the on-site safety and health cannot be the superintendent, even through the superintendent has safety inspection responsibilities as part of their duties. The SSHO can be part of the CQC organization, or be an independent individual/element appointed by official of the contractor.

1.4 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with USACE EM 385-1-1, and all federal, state, and local, laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

1.5 DRUG PREVENTION PROGRAM

Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site. Ensure that no employee uses illegal drugs or consumes alcohol during work hours. Ensure there are no employees under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine, or saliva specimens and test the injured and involved employees for the influence of drugs and alcohol. A copy of the test shall be made available to the Contracting Officer upon request.

1.6 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.6.1 Personnel Qualifications

1.6.1.1 Site Safety and Health Officer (SSHO)

Site Safety and Health Officer (SSHO) shall be provided at the work site at all times to perform safety and occupational health management,

surveillance, inspections, and safety enforcement for the Contractor. SSHO shall be employed by the prime. SSHO qualifications in resume form with education certifications shall be submitted per paragraph 1.2.. The SSHO can be as follows:

Either the CQC person or the superintendent shall be equally qualified as the SSHO and shall be capable of performing the full duties of the SSHO during any very brief period of work when the SSHO is absent. To insure that safety and health conditions are maintained/enforced at all times, and a SSHO is present at all times, the Contractor shall designate an alternate to perform the safety and health requirements stated herein to cover any extended period when the SSHO can not be present, such as during absences for vacations/extended sickness, or when there are multiple shifts that required additional coverage. The alternate shall have the same qualifications/training as the SSHO.

The SSHO, and alternate shall meet the following experience qualifications/requirements:

Level 1:
Worked on similar projects.
10-hour OSHA construction safety class or equivalent within last 3 years.
Competent person training as needed.

1.6.1.2 Competent Person for the Health Hazard Control and Respiratory Protection Program

Provide a competent person meeting the requirements of EM 385-1-1 who is:

a. Capable by education, specialized training and/or experience of anticipating, recognizing, and evaluating employee exposure to hazardous chemical, physical and biological agents in accordance with USACE EM 385-1-1, Section 6.

b. Capable of specifying necessary controls and protective actions to ensure worker health.

1.6.1.3 Crane Operators

Crane operators shall meet the requirements in USACE EM 385-1-1, Appendix G.

1.6.2 Personnel Duties

1.6.2.1 Site Safety and Health Officer (SSHO)/Superintendent

a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Safety inspection logs shall be attached to the Contractors' daily [production][quality control] report.

b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.

c. Maintain applicable safety reference material on the job site.

d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.

e. Implement and enforce accepted APPS and AHAs.

f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. A list of unresolved safety and health deficiencies shall be posted on the safety bulletin board.

g. Ensure sub-contractor compliance with safety and health requirements.

h. Other duties as identified per Specification Section 01451.

Failure to perform the above duties will result in dismissal of the SSHO, and/or CQC System Manager, and/or superintendent and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

1.6.3 Meetings

1.6.3.1 Preconstruction Conference

a. The Contractor will be informed, in writing, of the date of the preconstruction conference. The purpose of the preconstruction conference is for the Contractor and the Contracting Officer's representatives to become acquainted and explain the functions and operating procedures of their respective organizations and to reach mutual understanding relative to the administration of the overall project's APP before the initiation of work.

b. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent, site safety and health officer, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the AHAs and special plans, program and procedures associated with it).

c. The Contractor shall discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated activity hazard analyses (AHAs) that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, a schedule for the preparation, submittal, review, and acceptance of AHAs shall be established to preclude project delays.

d. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Work shall not begin until there is an accepted APP.

1.6.3.2 Weekly Safety Meetings

Conduct weekly safety meetings at the project site for all employees. The Contracting Officer will be informed of the meeting in advance and be

allowed attendance. Minutes showing contract title, signatures of attendees and a list of topics discussed shall be attached to the Contractors' daily quality control report.

1.6.3.3 Work Phase Meetings

The appropriate AHA shall be reviewed and attendance documented by the Contractor at the preparatory, initial, and follow-up phases of quality control inspection. The analysis should be used during daily inspections to ensure the implementation and effectiveness of safety and health controls.

1.7 TRAINING

1.7.1 New Employee Indoctrination

New employees (prime and sub-contractor) will be informed of specific site hazards before they begin work. Documentation of this orientation shall be kept on file at the project site.

1.7.2 Periodic Training

Provide Safety and Health Training in accordance with USACE EM 385-1-1 and the accepted APP. Ensure all required training has been accomplished for all onsite employees.

1.7.3 Training on Activity Hazard Analysis (AHA)

Prior to beginning a new phase, training will be provided to all affected employees to include a review of the AHA to be implemented.

1.8 ACCIDENT PREVENTION PLAN (APP)

The Contractor shall use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Preparation of Accident Prevention Plan". Where a paragraph or subparagraph element is not applicable to the work to be performed indicate "Not Applicable" next to the heading. Specific requirements for some of the APP elements are described below at paragraph 1.8.1. The APP shall be job-specific and shall address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Any portions of the Contractor's overall safety and health program referenced in the APP shall be included in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated site safety and health officer and any designated CSP and/or CIH.

Submit the APP to the Contracting Officer [15] [__] calendar days prior to the date of the preconstruction conference for acceptance. Work cannot

proceed without an accepted APP. The Contracting Officer reviews and comments on the Contractor's submitted APP and accepts it when it meets the requirements of the contract provisions.

Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and quality control manager. Should any unforeseen hazard become evident during the performance of work, the project superintendent shall inform the Contracting Officer, both verbally and in writing, for resolution as soon as possible. In the interim, all necessary action shall be taken by the Contractor to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public, and the environment.

Copies of the accepted plan will be maintained at the [Contracting Officer's][resident engineer's] office and at the job site. The APP shall be continuously reviewed and amended, as necessary, throughout the life of the contract. Unusual or high-hazard activities not identified in the original APP shall be incorporated in the plan as they are discovered.

1.8.1 EM 385-1-1 Contents

In addition to the requirements outlines in Appendix A of USACE EM 385-1-1, the following is required:

a. Names and qualifications (resumes including education, training, experience and certifications) of all site safety and health personnel designated to perform work on this project to include the designated site safety and health officer and other competent and qualified personnel to be used such as CSPs, CIHs, STSs, CHSTs. The duties of each position shall be specified.

b. Qualifications of competent and of qualified persons. As a minimum, competent persons shall be designated and qualifications submitted for each of the following major areas: excavation; scaffolding; fall protection; hazardous energy; health hazard recognition, evaluation and control of chemical, physical and biological agents; personal protective equipment and clothing to include selection, use and maintenance.

c. Health Hazard Control Program. The Contractor shall designate a competent and qualified person to establish and oversee a Health Hazard Control Program in accordance with USACE EM 385-1-1, Section 6. The program shall ensure that employees, on-site Government representatives, and others, are not adversely exposed to chemical, physical and biological agents and that necessary controls and protective actions are instituted to ensure health.

e. Crane Critical Lift Plan. Prepare and sign weight handling critical lift plans for lifts over 75 percent of crane hoist's maximum load limit; lifts involving more than one crane or hoist; lifts of personnel; and technically difficult lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks in

accordance with USACE EM 385-1-1, paragraph 16.c.18. and submit 15 calendar days prior to on-site work.

f. Alcohol and Drug Abuse Plan

(1) Describe plan for random checks and testing with pre-employment screening in accordance with the DFAR Clause subpart 252.223-7004, "Drug Free Work Force."

(2) Description of the on-site prevention program

g. Fall Protection and Prevention (FP&P) Plan. The plan shall be site specific and address all fall hazards in the work place and during different phases of construction. It shall address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 1.8 m (6 feet). A qualified person shall prepare and sign the plan. The plan shall include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, rescue and escape equipment and operations, training requirements, and monitoring methods. Fall Protection and Prevention Plan shall be revised every six months for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems or work habits. The accepted Fall Protection and Prevention Plan shall be kept and maintained at the job site for the duration of the project.

h. Site Demolition Plan. The safety and health aspects prepared in accordance with Section 02220A, Demolition 02220, "DEMOLITION".

i. Training Records and Requirements. List of mandatory training and certifications which are applicable to this project (e.g. explosive actuated tools, confined space entry, fall protection, crane operation, vehicle operator, forklift operators, personal protective equipment); list of requirements for periodic retraining/certification; outline requirements for supervisory and employee safety meetings.

1.9 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1. Submit the AHA for review at least 15 calendar days prior to the start of each phase. Format subsequent AHA as amendments to the APP. An AHA will be developed by the Contractor for every operation involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform work. The analysis must identify and evaluate hazards and outline the proposed methods and techniques for the safe completion of each phase of work. At a minimum, define activity being performed, sequence of work, specific safety and health hazards anticipated, control measures (to include personal protective equipment) to eliminate or reduce each hazard to acceptable levels, equipment to be used, inspection requirements, training requirements for all involved, and the competent person in charge of that phase of work. For work with fall hazards, including fall hazards associated with scaffold erection and removal, identify the appropriate fall arrest systems. For work with materials handling equipment, address safeguarding measures related to materials handling equipment. For work requiring excavations, include requirements for safeguarding excavations. An activity requiring an AHA shall not proceed until the AHA has been accepted by the Contracting Officer's representative and a meeting has been conducted by the Contractor to discuss its contents with everyone engaged

in the activity, including on-site Government representatives. The Contractor shall document meeting attendance at the preparatory, initial, and follow-up phases of quality control inspection. The AHA shall be continuously reviewed and, when appropriate, modified to address changing site conditions or operations. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

Activity hazard analyses shall be updated as necessary to provide an effective response to changing work conditions and activities. The on-site superintendent, site safety and health officer and competent persons used to develop the AHAs, including updates, shall sign and date the AHAs before they are implemented.

1.10 DISPLAY OF SAFETY INFORMATION

Within 15 calendar days after commencement of work, erect a safety bulletin board at the job site. The following information shall be displayed on the safety bulletin board in clear view of the on-site construction personnel, maintained current, and protected against the elements and unauthorized removal, no separate payment for the furnishing/erecting of the bulletin board as specified and cost there of shall be considered a subsidiary obligation of the contractor:

a. Map denoting the route to the nearest emergency care facility.

b. Emergency phone numbers.

c. Copy of the most up-to-date APP.

d. AHA(s).

e. OSHA 300A Form.

f. Confined space entry permit (If Required).

g. A sign indicating the number of hours worked since last lost workday accident.

h. OSHA Safety and Health Protection-On-The-Job Poster.

i. Safety and Health Warning Posters.

1.11 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

1.12 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.13 REPORTS

1.13.1 Accident Reports

a. For recordable injuries and illnesses, and property damage accidents resulting in at least $2,000 in damages, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the [Navy Contractor Significant Incident Report (CSIR) form] [USACE Accident Report Form 3394] and provide the report to the Contracting Officer within 1 calendar day(s) of the accident. The Contracting Officer will provide copies of any required or special forms.

b. For a weight handling equipment accident the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the WHE Accident Report form and provide the report to the Contracting Officer within 30 calendar days of the accident. The Contracting Officer will provide a blank copy of the accident report form.

1.13.2 Accident Notification

Notify the Contracting Officer as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than $2,000, or any weight handling equipment accident involving a overturned crane, collapsed boom, or any other major damage to the crane or adjacent property. Information shall include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on site and Government investigation is conducted.

1.13.3 Monthly Exposure Reports

Monthly exposure reporting to the Contracting Officer is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and subcontractor. The Contracting Officer will provide copies of any special forms.

1.13.4 Regulatory Citations and Violations

Contact the Contracting Officer immediately of any OSHA or other regulatory agency inspection or visit, and provide the Contracting Officer with a copy of each citation, report, and contractor response. Correct violations and citations promptly and provide written corrective actions to the Contracting Officer.

1.13.5 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1, Appendix H and as specified herein with Daily Reports of Inspections.

1.13.6 Certificate of Compliance

The Contractor shall provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). Certificate shall state that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance shall comply with 29 CFR 1926 and USACE EM 385-1-1 section 16 and Appendix H. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used. For cranes at DOD activities in foreign countries, the Contractor shall certify that the crane and rigging gear conform to the appropriate host country safety standards. The Contractor shall also certify that all of its crane operators working on the DOD activity have been trained in the proper use of all safety devices (e.g., anti-two block devices). These certifications shall be posted on the crane.

]1.14 HOT WORK

Prior to performing "Hot Work" (welding, etc.) or operating other flame-producing devices, a written permit shall be requested from the Fire Division. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. The Contractor will provide at least two (2) twenty (20) pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity.

a. Oil painting materials (paint, brushes, empty paint cans, etc.), and all flammable liquids shall be removed from the facility at quitting time. All painting materials and flammable liquids shall be stored outside in a suitable metal locker or box and will require re-submittal with non-hazardous materials.

b. Accumulation of trays, paper, shavings, sawdust, boxes and other packing materials shall be removed from the facility at the close of each workday and such material disposed of in the proper containers located away from the facility.

c. The storage of combustible supplies shall be a safe distance from structures.

d. Area outside the facility undergoing work shall be cleaned of trash, paper, or other discarded combustibles at the close of each workday.

e. All portable electric devices (saws, sanders, compressors, extension chord, lights, etc.) shall be disconnected at the close of each workday. When possible, the main electric switch in the facility shall be deactivated.

f. When starting work in the facility, Contractors shall require their personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency Fire Division phone number. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE FIRE DIVISION IMMEDIATELY.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 CONSTRUCTION AND/OR OTHER WORK

The Contractor shall comply with USACE EM 385-1-1, NFPA 241, the APP, the AHA, and other related submittals and activity fire and safety regulations.

3.1.1 Hazardous Material Use

Each hazardous material must receive approval prior to being brought onto the job site or prior to any other use in connection with this contract. Allow a minimum of 10 working days for processing of the request for use of a hazardous material. Any work or storage involving hazardous chemicals or materials must be done in a manner that will not expose Government or Contractor employees to any unsafe or unhealthful conditions. Adequate protective measures must be taken to prevent Government or Contractor employees from being exposed to any hazardous condition that could result from the work or storage. The Prime Contractor shall keep a complete inventory of hazardous materials brought onto the work-site. Approval by the Contracting Officer of protective measures and storage area is required prior to the start of the work.

3.1.2 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocynates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials.

3.1.3 Unforeseen Hazardous Material

The design should have identified materials such as PCB, lead paint, and friable and non-friable asbestos. If [additional] material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

3.2 PRE-OUTAGE COORDINATION MEETING

Contractors are required to apply for utility outages at least 15 days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary sketches. Special requirements for electrical outage requests are contained elsewhere in this specification section. Once approved, and prior to beginning work on the utility system requiring shut down, the Contractor shall attend a pre-outage coordination meeting with the

Contracting Officer and to review the scope of work and the lock-out/tag-out procedures for worker protection. No work will be performed on energized electrical circuits unless proof is provided that no other means exist.

3.3 FALL HAZARD PROTECTION AND PREVENTION

The Contractor shall establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. The program shall include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and escape procedures.

3.3.1 Training

The Contractor shall institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, the Contractor shall provide training for each employee who might be exposed to fall hazards. Training requirements shall be in accordance with USACE EM 385-1-1, section 21.A.16.

3.3.2 Fall Protection Equipment

The Contractor shall enforce use of the fall protection equipment designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is on a surface 1.8 m(6 feet) or more above lower levels. Fall protection systems such as guardrails, personnel fall arrest system, safety nets, etc., are required when working within 1.8m (6 feet) of any leading edge. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with USACE EM 385-1-1, paragraphs 05.I. and 05.J. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems may be required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. Fall protection must comply with 29 CFR 1926.500, Subpart M and USACE EM 385-1-1.

3.3.2.1 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components shall meet ANSI Z359.1. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabiners shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 1.8 m (6 feet). The total fall distance shall always be taken into consideration when attaching a person to a fall arrest system.

3.3.3 Safety Nets

If safety nets are used as the selected fall protection system on the

project, they shall be provided at unguarded workplaces, over water, machinery, dangerous operations and leading edge work. Safety nets shall be tested immediately after installation with a drop test of 181.4 kg (400 pounds) and every six months thereafter.

3.3.4 Existing Anchorage

Existing anchorages, to be used for attachment of personal fall arrest equipment, shall be certified (or re-certified) by a qualified person in accordance with ANSI Z359.1.

3.3.5 Horizontal Lifelines

Horizontal lifelines shall be designed, installed, certified and used under the supervision of a qualified person as part of a complete fall arrest system (29 CFR 1926.500).

3.4 SCAFFOLDING

Employees shall be provided with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Access to scaffold platforms greater than 6 m (20 feet) in height shall be accessed by use of a scaffold stair system. Vertical ladders commonly provided by scaffold system manufacturers shall not be used for accessing scaffold platforms greater than 6 m (20 feet) in height. The use of an adequate gate is required. Contractor shall ensure that employees are qualified to perform scaffold erection and dismantling. Do not use scaffold without the capability of supporting at least four times the maximum intended load or without appropriate fall protection as delineated in the accepted fall protection and prevention plan. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward. Special care shall be given to ensure scaffold systems are not overloaded. Side brackets used to extend scaffold platforms on self-supported scaffold systems for the storage of material is prohibited. The first tie-in shall be at the height equal to 4 times the width of the smallest dimension of the scaffold base. Work platforms shall be placed on mud sills. Scaffold or work platform erectors shall have fall protection during the erection and dismantling of scaffolding or work platforms that are more than six feet. Delineate fall protection requirements when working above six feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and Activity Hazard Analysis (AHA) for the phase of work.

3.5 EQUIPMENT

3.5.1 Material Handling Equipment

a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.

b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.

c. Operators of forklifts or power industrial trucks shall be licensed in accordance with OSHA.

3.5.2 Weight Handling Equipment

a. Cranes must be equipped with:

(1) Load indicating devices (LIDs) and a boom angle or radius indicator,

(2) or load moment indicating devices (LMIs).

(3) Anti-two block prevention devices.

(4) Boom hoist hydraulic relief valve, disconnect, or shutoff (stops hoist when boom reaches a predetermined high angle).

(5) Boom length indicator (for telescoping booms).

(6) Device to prevent uncontrolled lowering of a telescoping hydraulic boom.

(7) Device to prevent uncontrolled retraction of a telescoping hydraulic boom.

b. The Contractor shall notify the Contracting Officer 15 days in advance of any cranes entering the activity so that necessary quality assurance spot checks can be coordinated. Contractor's operator shall remain with the crane during the spot check.

c. The Contractor shall comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Erection shall be performed under the supervision of a designated person (as defined in ASME B30.5). All testing shall be performed in accordance with the manufacturer's recommended procedures.

d. The Contractor shall comply with ASME B30.5 for mobile and locomotive cranes, ASME B30.22 for articulating boom cranes and ASME B30.8 for floating cranes and floating derricks.

e. The presence of Government personnel does not relieve the Contractor of an obligation to comply with all applicable safety regulations. The Government will investigate all complaints of unsafe or unhealthful working conditions received in writing from contractor employees, federal civilian employees, or military personnel.

f. Each load shall be rigged/attached independently to the hook/master-link in such a fashion that the load cannot slide or otherwise become detached. Christmas-tree lifting (multiple rigged materials) is not allowed.

g. Under no circumstance shall a Contractor make a lift at or above 90% of the cranes rated capacity in any configuration.

h. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and shall follow the requirements of USACE EM 385-1-1 section 11 and ASME B30.5 or ASME B30.22 as applicable.

i. Crane suspended personnel work platforms (baskets) shall not be used unless the Contractor proves that using any other access to the

work location would provide a greater hazard to the workers or is impossible. Personnel shall not be lifted with a line hoist or friction crane.

j. A fire extinguisher having a minimum rating of 10BC and a minimum nominal capacity of 5lb of extinguishing agent shall be available at all operator stations or crane cabs. Portable fire extinguishers shall be inspected, maintained, and recharged as specified in NFPA 10, Standard for Portable Fire Extinguishers.

k. All employees shall be kept clear of loads about to be lifted and of suspended loads.

l. A weight handling equipment operator shall not leave his position at the controls while a load is suspended.

m. Only Contractor crane operators who have met the requirements of 29 CFR 1910.94, 29 CFR 1910.120, 29 CFR 1926.65, 29 CFR 1926.500, USACE EM 385-1-1, ASME B30.5, and ASME B30.22 and other local and state requirements shall be authorized to operate the crane.

n. The Contractor shall use cribbing when performing lifts on outriggers.

o. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.

p. A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.

q. A substantial and durable rating chart containing legible letters and figures shall be provided with each crane and securely mounted onto the crane cab in a location allowing easy reading by the operator while seated in the control station.

r. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.

s. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.

t. The Contractor shall certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

3.5.3 Equipment and Mechanized Equipment

a. Equipment shall be operated by designated qualified operators. Proof of qualifications shall be kept on the project site for review.

b. Manufacture specifications or owner's manual for the equipment shall be on site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA or USACE EM 385-1-1. Such additional safety precautions or requirements shall be incorporated into the AHAs.

c. Equipment and mechanized equipment shall be inspected in accordance with manufacturer's recommendations for safe operation by a competent person prior to being placed into use.

d. Daily checks or tests shall be conducted and documented on equipment and mechanized equipment by designated competent persons.

3.6 EXCAVATIONS

The competent person for excavations performed as a result of contract work shall be on-site when excavation work is being performed, and shall inspect, and document the excavations daily prior to entry by workers. The competent person must evaluate all hazards, including atmospheric, that may be associated with the work, and shall have the resources necessary to correct hazards promptly.

3.6.1 Utility Locations

Prior to digging, the appropriate digging permit must be obtained. All underground utilities in the work area must be positively identified by a private utility locating service in addition to any station locating service and coordinated with the station utility department. Any markings made during the utility investigation must be maintained throughout the contract.

3.6.2 Utility Location Verification

The Contractor must physically verify underground utility locations by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system. Digging within .061 m (2 feet) of a known utility must not be performed by means of mechanical equipment; hand digging shall be used. If construction is parallel to an existing utility the utility shall be exposed by hand digging every 30.5 m (100 feet) if parallel within 1.5 m (5 feet) of the excavation.

3.6.3 Utilities with Concrete Slabs

Utilities located within concrete slabs or pier decks, bridges, and the like are extremely difficult to identify. The location must be coordinated with station utility departments in addition to a private locating service. Outages on system utilities shall be used in circumstances where concrete chipping, saw cutting, or core drilling is required and utilities are unable to be completely identified.

3.6.4 Shoring Systems

Trench and shoring systems must be identified in the accepted safety plan and AHA. Manufacture tabulated data and specifications or registered engineer tabulated data for shoring or benching systems shall be readily available on site for review. Job-made shoring or shielding shall have the registered professional engineer stamp, specifications, and tabulated data. Extreme care must be used when excavating near direct burial electric underground cables.

3.6.5 Trenching Machinery

Trenching machines with digging chain drives shall be operated only when the spotters/laborers are in plain view of the operator. Operator and

spotters/laborers shall be provided training on the hazards of the digging chain drives with emphasis on the distance that needs to be maintained when the digging chain is operating. Documentation of the training shall be kept on file at the project site.

3.7 ELECTRICAL

3.7.1 Conduct of Electrical Work

Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Positive cable identification must be made prior to submitting any outage request for electrical systems. Arrangements are to be coordinated with the Contracting Officer and Station Utilities for identification. The Contracting Officer will not accept an outage request until the Contractor satisfactorily documents that the circuits have been clearly identified. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When working in energized substations, only qualified electrical workers shall be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. Insulating blankets, hearing protection, and switching suits may be required, depending on the specific job and as delineated in the Contractor's AHA.

3.7.2 Portable Extension Cords

Portable extension cords shall be sized in accordance with manufacturer ratings for the tool to be powered and protected from damage. All damaged extension cords shall be immediately removed from service. Portable extension cords shall meet the requirements of NFPA 70.

3.8 WORK IN CONFINED SPACES

The Contractor shall comply with the requirements in Section 06.I of USACE EM 385-1-1 and OSHA 29 CFR 1910.146. Any potential for a hazard in the confined space requires a permit system to be used.

a. Entry Procedures. Prohibit entry into a confined space by personnel for any purpose, including hot work, until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. (See Section 06.I.05 of USACE EM 385-1-1 for entry procedures.) All hazards pertaining to the space shall be reviewed with each employee during review of the AHA.

b. Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its' action level.

c. Ensure the use of rescue and retrieval devices in confined spaces greater than 1.5 m (5 feet) in depth. Conform to Sections 06.I.09, 06.I.10 and 06.I.11 of USACE EM 385-1-1.

d. Sewer wet wells require continuous atmosphere monitoring with audible alarm for toxic gas detection.

e. Include training information for employees who will be involved as entrants and attendants for the work. Conform to Section 06.I.06 of USACE EM 385-1-1.

f. Daily Entry Permit. Post the permit in a conspicuous place close to the confined space entrance.

3.9 CRYSTALLINE SILICA

Grinding, abrasive blasting, and foundry operations of construction materials containing crystalline silica, shall comply with OSHA regulations, such as 29 CFR 1910.94, and USACE EM 385-1-1, Appendix C. The Contractor shall develop and implement effective exposure control and elimination procedures to include dust control systems, engineering controls, and establishment of work area boundaries, as well as medical surveillance, training, air monitoring, and personal protective equipment.

3.10 HOUSEKEEPING

3.10.1 Clean-Up

All debris in work areas shall be cleaned up daily or more frequently if necessary. Construction debris may be temporarily located in an approved location, however garbage accumulation must be removed each day.

3.10.2 Dust control

In addition to the dust control measures required elsewhere in the contract documents, dry cutting of brick or masonry shall be prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to this prohibition on a case-by-case basis. Wet cutting must address control of water run off.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01999

LISTING OF ENCLOSED DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

-- End of Section Table of Contents --

SECTION 01999

LISTING OF ENCLOSED DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

PART 1 GENERAL

1.1 ENCLOSURES

This Section contains documents referenced in other Sections of the specifications. They are consolidated in this Section for the convenience of the Contractor and the Government. The Contractor may reproduce the enclosed forms for its use or obtain a supply of the forms from the Contracting Officer.

LIST OF ENCLOSED DOCUMENTS

CONSTRUCTION QUALITY MANAGEMENT REPORT - NCE FORM 63, 6 MAY 77. (2 Sides)

PREPARATORY INSPECTION CHECKLIST (3 SIDES)

INITIAL INSPECTION CHECKLIST (2 SIDES)

ACCIDENT PREVENTION PROGRAM ACTIVITY HAZARD ANALYSIS- NCE FORM 129, 6 JUNE 1986.

RESIDENT MANAGEMENT SYSTEM FORMS (SAMPLES)

A. CURRENT ACTIVITY SUMMARY (SMPL)

B. INITIAL INSPECTION WORKSHEET

C. PREPARATORY INSPECTION WORKSHEET

D. CONTRACTOR QUALITY CONTROL REPORT (QCR)

E. TRANSMITTAL SHEET (4025-R)

SUBMITTAL REGISTER - ENG FORM 4288, MAY 91

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATIONS OF COMPLIANCE ENG FORM 4025, MAY 91 (2 SIDES)

REPORT OF OPERATIONS - PIPELINE, DIPPER OR BUCKET DREDGES - ENG FORM 4267, JAN 70 (2 SIDES)

OVERDEPTH AND TOLERANCE DRAWINGS

NOTICE TO MARINERS FORM

BENCHMARKS AND HORIZONTAL CONTROL DATA

GENERAL DECISION NO. IL030018

CASEV05

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

--End of Section--

CONSTRUCTION QUALITY CONTROL MANAGEMENT

DATE_____ REPORT_____
CONTRACTOR _____ CONTRACT NO._____
PROJECT NAME _____ LOCATION _____
WEATHER TYPE_____ TEMP. MAX_____ MIN_____ RAINFALL_____ GAGE READING_____
EMPLOYEES: SUPV._____SKILLED_____ LABORERS_____LENGTH OF SHIFT _____HR_____

WORK RESPONSIBILITY: NAME (PRIME OR SUBCONTRACTOR) AND AREA OF RESPONSIBILITY .
A._____

B. _____

C. _____

D. _____

E. _____

WORK PERFORMED TODAY: (LOCATION, DESCRIPTION, QUANTITY AND RESPONSIBILITY BY LETTER REFERENCE
(Relate to Items on the Progress Chart or CPM)

INSPECTION: (DESCRIPTION OF INSPECTION AND LOCATION. INCLUDE OFF-SITE, MATERIALS AND EQUIPMENT INSPECTION.)

A. PREPARATORY PHASE:

B. INITIAL PHASE:

C. CONTINUOUS PHASE:

RESULTS OF INSPECTION: (INCLUDE FINDINGS, DEFICIENCIES OBSERVED & CORRECTIVE ACTION)

NCE FORM 63 EDITION OF 22 JUNE 76 IS OBSOLETE
6 MAY 77

RESULTS OF SURVEILLANCE CONTINUED:

_____

TEST PERFORMED: TYPE, LOCATION, RESULTS INCLUDING FAILURES & REMEDIAL ACTION, (ATTACH COPY OF TEST REPORT OR NOTATION WHEN IT WILL BE FURNISHED.)

_____

WORK ITEMS BEHIND SCHEDULE: REASON, EFFECT ON PROGRESS SCHEDULE AND ACTION TAKEN.

_____

JOB SAFETY: (REPORT CONDITIONS, DEFICIENCIES, CORRECTIVE ACTION & RESULTS.)

_____

REMARKS: LIST ATTACHMENT AND OTHER MANAGEMENT ACTIONS TAKEN TO ASSURE QUALITY CONSTRUCTION

IF INSPECTION & RESULTS ARE NOT LISTED THEN IT IS ASSUMED THAT QUALITY CONTROL IS NOT BEING IMPLEMENTED.
THE ABOVE REPORT IS COMPLETE AND CORRECT AND ALL MATERIALS & SUPPLIES INCORPORATED IN THE WORK ARE IN COMPLIANCE WITH THE TERMS OF THE CONTRACT EXCEPT AS NOTED:

_____
CONTRACTOR'S APPROVED REPRESENTATIVE SIGNATURE

PREPARATORY INSPECTION CHECKLIST

CONTRACT NO:_____ DATE:_____

TITLE:_____ SPECS. SECTION:_____

MAJOR DEFINABLE SEGMENT OF WORK:_____

A. PERSONNEL PRESENT:

	NAME	POSITION	COMPANY
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____

B. TRANSMITTAL INVOLVED:

	NUMBER & ITEM	CODE	CONTRACTOR OR GOVERNMENT APPROVAL
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____

PREPARATORY INSPECTION CHECKLIST

B-I. Have all items involved been approved Yes_____ No_____

B-II. What item have not been approved?

	ITEM	STATUS
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

C. Are all materials on hand? Yes_____No_____

C-I. Are all materials on hand accordance with approvals? Yes_____No_____

C-II. Items not on hand or not in accordance with transmittals:

1. _____
2. _____
3. _____
4. _____

D. Test required in accordance with contract requirements:

	TEST	PARAGRAPH
1.	_____	_____
2.	_____	_____
3.	_____	_____

PREPARATORY INSPECTION CHECKLIST

E. ACCIDENT PREVENTION PREPLANNING – HAZARD CONTROL MEASURES:

E-1 Applicable Outlines)Attach completed copies):

1. _____
2. _____
3. _____
4. _____
5. _____

E-II Operational Equipment Checklist

ATTACHED FOR:

1. _____
2. _____
3. _____

ON FILE FOR:

1. _____
2. _____
3. _____

_____
QUALITY CONTROL – PRIME CONTRACTOR

INITIAL INSPECTION CHECKLIST

CONTRACT NO: _____ DATE: _____

Description and Location of Work Inspected: _____

_____ Specs. Section:_____

REFERENCE CONTRACT DRAWING:

_____

A. PERSONNEL PRESENT :

	NAME	POSITION	COMPANY
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____

B. MATERIALS BEING USED ARE IN STRICT COMPLIANCE WITH THE CONTRACT PLANS

AND SPECIFICATION: YES_____ NO_____

IF NOT,EXPLAIN:_____

_____

_____

INITIAL INSPECTION CHECKLIST

C. PROCEDURES AND WORK METHODS WITNESSED ARE IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS: YES____ NO_____
IF NOT, EXPLAIN: _____

D. WORKMANSHIP IS ACCEPTABLE: YES_____ NO _____ STATE AREAS WHERE IMPROVEMENT IS NEEDED: _____

E. SAFETY VIOLATIONS AND CORRECTIVE ACTION TAKEN: _____

_____
QUALITY CONTROL REPRESENTATIVE

ACCIDENT PREVENTION PROGRAM
ACTIVITY HAZARD ANALYSIS

Page of

1. Contract No.	2. Project	3. Facility
4. Date	5. Location	6. Estimated Start Date

7. Item	8. Phase of Work	9. Safety Hazard	10. Precautionary Action Taken

11. Contractor (Signature & Date)

12. Report discussed with contractor/ superintendent on	13. Contracting Officer (Signature & Date)

US Army Corps of Engineers

Current Activity Summary

08 Jul 2002

Project Name: Repair of North & South Piers, Baloney Harbor, MI
Contract Number: DACW35-02-C-####

Location Name

Activity Number	Activity Description	QUANTITY	UNIT PRICE	AMOUNT
CLIN 0001	***North and South Pier Repairs***	***1***	***$3,437,787.18 / LS***	***$3,437,787.18***
1001	Bonds			$49,136.00
1002A	Prepare & Mobilize Equipment			$94,864.00
1002B	Prepare Site			$72,500.00
1002C	Office Trailers & Utilities			$22,500.00
1003A	Demobilize Equipment			$5,000.00
1003B	Site Restoration			$2,500.00
1003C	As-Built Drawings			$2,500.00
1004A	Furnish SSP			$750,000.00
1004B	Furnish Special Piles			$50,000.00
1004C	Furnish SSP Pile Shoes			$30,000.00
1004D	Fabricate Template			$6,000.00
1004E	Excavate Driving Line			$100,000.00
1004F	Set & Drive SSP			$500,000.00
1004G	Backfill Driving Line			$50,000.00
1004I	South Driving Line Obstruction Removal			$117,787.18
1005A	Furnish Misc. Steel			$193,000.00
1005B	Furnish Tie-Rods			$20,000.00
1005C	Furnish Plate Washers			$15,000.00
1005D	Furnish Fastners			$12,000.00
1005E	Place Misc. Steel			$280,000.00
1006A	Demo Concrete & Remove (Rubblemound)			$100,000.00
1006B	Excavate Existing Cribs (Rubblemound Area)			$185,000.00
1006C	Disposal of Demo Materials (Rubblemound Area)			$25,000.00
1007A	Furnish H-Pile Materials			$22,800.00
1007B	Install H-Piles			$27,200.00
1008A	Furnish Rebar			$135,000.00
1008B	Place Concrete (2000 CY @ $250.00/CY)			$500,000.00
1009A	Furnish Handrails			$60,000.00
1009B	Place Handrails			$7,000.00
1009C	Paint Handrails			$3,000.00
				$3,437,787.18
CLIN 0002	***Fill Stone:***	***0***	***$0.00 / NA***	***$0.00***
	No Activities Assigned to this Bid Item.			
CLIN 0002AA	***First 18,000 tons***	***18,000***	***$22.50 / TN***	***$405,000.00***
2001	Furnish & Place Fill Stone - 1st 18,000 Tons			$405,000.00
				$405,000.00
CLIN 0002AB	***Over 10,000 tons***	***2,000***	***$22.50 / TN***	***$45,000.00***
2101	Furnish & Place Fill Stone - Over 18,000 Tons			$45,000.00
				$45,000.00
CLIN 0003	***Underlayer Stone:***	***0***	***$0.00 / NA***	***$0.00***
	No Activities Assigned to this Bid Item.			
CLIN 0003AA	***First 4,500 Tons***	***4,500***	***$31.50 / TN***	***$141,750.00***
3001	Furnish & Place Underlayer Stone - 1st 4,500 Tons			$141,750.00
				$141,750.00
CLIN 0003AB	***Over 4,500 tons***	***450***	***$31.50 / TN***	***$14,175.00***
3101	Furnish & Place Underlayer Stone - Over 4,500 Tons			$14,175.00
				$14,175.00
CLIN 0004	***Scour Stone:***	***0***	***$0.00 / NA***	***$0.00***

US Army Corps of Engineers

Current Activity Summary

08 Jul 2002

Location Name

Project Name: Repair of North & South Piers, Baloney Harbor, MI
Contract Number: DACW35-02-C-####

Activity Number	Activity Description	QUANTITY	UNIT PRICE	AMOUNT
CLIN 0004	***Scour Stone: (Continued)***	***0***	***$0.00 / NA***	***$0.00***
	No Activities Assigned to this Bid Item.			
CLIN 0004AA	***First 3,500 tons***	***3,500***	***$27.50 / TN***	***$96,250.00***
4001	Furnish & Place Scour Stone - 1st 3,500 Tons			$96,250.00
				$96,250.00
CLIN 0004AB	***Over 3,500 tons***	***600***	***$27.50 / TN***	***$16,500.00***
4101	Furnish & Place Scour Stone - Over 3,500 Tons			$16,500.00
				$16,500.00
CLIN 0005	***Bedding Stone:***	***0***	***$0.00 / NA***	***$0.00***
	No Activities Assigned to this Bid Item.			
CLIN 0005AA	***First 3,000 tons***	***3,000***	***$28.00 / TN***	***$84,000.00***
5001	Furnish & Place Bedding Stone - 1st 3,000 Tons			$84,000.00
				$84,000.00
CLIN 0005AB	***Over 3,000 tons***	***600***	***$28.00 / TN***	***$16,800.00***
5101	Furnish & Place Bedding Stone - Over 3,000 Tons			$16,800.00
				$16,800.00
CLIN 0006	***Armor Stone:***	***0***	***$0.00 / NA***	***$0.00***
	No Activities Assigned to this Bid Item.			
CLIN 0006AA	***First 6,000 tons***	***6,000***	***$34.00 / TN***	***$204,000.00***
6001	Furnish & Place Armor Stone - 1st 6,000 Tons			$204,000.00
				$204,000.00
CLIN 0006AB	***Over 6,000 tons***	***825***	***$34.00 / TN***	***$28,050.00***
6101	Furnish & Place Armor Stone - Over 6,000 Tons			$28,050.00
				$28,050.00

Sum of CLINs	**$4,489,312.18**
Sum of Activities	**$4,489,312.18**
Difference	**$0.00**

INITIAL INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK : Site Cast Concrete

A. ACTIVITIES INCLUDED UNDER Site Cast Concrete -

ABC Company, Inc

1008A	Furnish Rebar	$135,000.00
1008B	Place Concrete (2000 CY @ $250.00/CY)	$500,000.00
		$635,000.00

B. QUALITY CONTROL REQUIREMENTS -

SUBMITTALS REQUIRED -

00700	1	SF 1413 for Subcontracts		Not submitted
03250	1	Expansion Joint Materials	A	Approved
03307	1	Batching and Mixing Equipment	F	Receipt
03307	2	Conveying and Placement Equipment	F	Receipt
03307	3	Reinforcing Steel (Mat Steel, Bar Steel	A	Approved
03307	4	Concrete Mixture Proportions;	A	Approved
03307	5	Cementitious Material	A	Approved
03307	6	Aggregates	A	Approved
03307	7	Manufacturer's Literature	A	Approved
03307	8	Batching & Mixing Equipment - Redi-Mix	F	Receipt
03307	9	Conveying & Placing Equipment - Redi-Mix	F	Receipt
03307	10	Concrete Mix Proportions - Redi-Mix	A	Approved
03307	11	Cementitious Material - Redi-Mix	A	Approved
03307	12	Aggregates - Redi Mix	A	Approved
03307	13	Manufacturer's Data; AEA - Redi-Mix	A	Approved
03307	14	Manufacturer's Data; WRA - Redi-Mix	A	Approved
05500	2	Welders	F	Receipt
05552	4	Mill Certs - Ladder Grab Rails	A	Approved

QC TESTS -

CT # 00001	Obtain 1 Cylinder for strength testing at 7 days and 2 Cylinders for 28 days. Minimum of one set per day or 1 set per every 150 CY placed. (ASTM C-94) Required strength at 7 Days = 2,800 p.s.i.; 28 Days = 4,000 p.s.i.	Not Performed
CT # 00002	Check Batch slips for water/cement ratio not to exeeced 0.40 by weight	Not Performed
CT # 00003	Check Slump at both mixer and discharge ends: Pumped = 3" - 7" at discharge Maximum of 5" at Mixer if no admixture used Maximum of 7" at mixer if admixture is used 2 checks per shift is minimum required	Not Performed
CT # 00004	2 Air Content tests required per shift. Check approved mix design for maximum and minimum values acceptable.	Not Performed

C. QA/QC PUNCH LIST ITEMS -

INITIAL INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK : Site Cast Concrete

C. QA/QC PUNCH LIST ITEMS - Cont.

INCLUDE ADDITIONAL COMMENTS ON DAILY REPORT

_____
_____
_____

D. LABOR RATES -

LABOR CLASSIFICATIONS	BASIC RATE	FRINGE BENEFITS	PLUS %	TOTAL WAGE/HR

E. INSPECTION CHECKS -

		IN COMPLIANCE Yes/ No/ NA
1.	Check rebar for proper bar sizes, per approved shop drawings.	___ ___ ___
2.	Check for 3" clearance of rebar from form sides and top surface.	___ ___ ___
3.	Check for proper use of concrete vibrators	___ ___ ___
4.	Check for correct finish elevations.	___ ___ ___
5.	Concrete finish shall meet approval of on-site Government Representative. Make sure all finshers are aware of approved finishing method and degree of brooming.	___ ___ ___
6.	Ensure embedded items are not displaced during placement and finishing of the concrete.	___ ___ ___
7.	_____	___ ___ ___
8.	_____	___ ___ ___
9.	_____	___ ___ ___
10.	_____	___ ___ ___

F. JOB SITE SAFETY -

		IN COMPLIANCE Yes/ No/ NA
1.	All employees working over water are required to wear workvests (PFDs)	___ ___ ___
2.	All employees are to wear hard hats.	___ ___ ___
3.	Concrete Pump must be shut down prior to cleaning.	___ ___ ___
4.	Review Activity Hazard Analysis for Concrete Work prior to performing this work.	___ ___ ___
5.	_____	___ ___ ___
6.	_____	___ ___ ___
7.	_____	___ ___ ___
8.	_____	___ ___ ___

G. QA Evaluation Notes -

		DISCUSSED Yes/ No/ NA
1.	_____	___ ___ ___
2.	_____	___ ___ ___
3.	_____	___ ___ ___
4.	_____	___ ___ ___

PREPARATORY INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK : Site Cast Concrete

A. ACTIVITIES INCLUDED UNDER Site Cast Concrete -

ABC Company, Inc.

1008A	Furnish Rebar	$135,000.00
1008B	Place Concrete (2000 CY @ $250.00/CY)	$500,000.00
		$635,000.00

B. QUALITY CONTROL REQUIREMENTS -

SUBMITTALS REQUIRED -

00700	1	SF 1413 for Subcontracts		Not submitted
03250	1	Expansion Joint Materials	A	Approved
03307	1	Batching and Mixing Equipment	F	Receipt
03307	2	Conveying and Placement Equipment	F	Receipt
03307	3	Reinforcing Steel (Mat Steel, Bar Steel	A	Approved
03307	4	Concrete Mixture Proportions;	A	Approved
03307	5	Cementitious Material	A	Approved
03307	6	Aggregates	A	Approved
03307	7	Manufacturer's Literature	A	Approved
03307	8	Batching & Mixing Equipment - Redi-Mix	F	Receipt
03307	9	Conveying & Placing Equipment - Redi-Mix	F	Receipt
03307	10	Concrete Mix Proportions - Redi-Mix	A	Approved
03307	11	Cementitious Material - Redi-Mix	A	Approved
03307	12	Aggregates - Redi Mix	A	Approved
03307	13	Manufacturer's Data; AEA - Redi-Mix	A	Approved
03307	14	Manufacturer's Data; WRA - Redi-Mix	A	Approved
05500	2	Welders	F	Receipt
05552	4	Mill Certs - Ladder Grab Rails	A	Approved

C. QA/QC PUNCH LIST ITEMS -

INCLUDE ADDITIONAL COMMENTS ON DAILY REPORT

D. LABOR RATES -

LABOR CLASSIFICATIONS	BASIC RATE	FRINGE BENEFITS	PLUS %	TOTAL WAGE/HR

PREPARATORY INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK : Site Cast Concrete

E. REVIEW CONTRACT DRAWINGS AND SPECIFICATIONS -

DRAWING / SPEC. NO	COMMENTS / CONFLICTS

		DISCUSSED Yes/ No/ NA
1.		___ ___ ___
2.		___ ___ ___
3.		___ ___ ___
4.		___ ___ ___

F. REPETITIVE DEFICIENCIES FOUND ON PREVIOUS PROJECTS -

		DISCUSSED Yes/ No/ NA
1.		___ ___ ___
2.		___ ___ ___
3.		___ ___ ___
4.		___ ___ ___

G. INSPECTION CHECKS -

		IN COMPLIANCE Yes/ No/ NA
1.		___ ___ ___
2.		___ ___ ___
3.		___ ___ ___
4.		___ ___ ___

H. JOB SITE SAFETY -

		IN COMPLIANCE Yes/ No/ NA
1.		___ ___ ___
2.		___ ___ ___
3.		___ ___ ___
4.		___ ___ ___

I. QUALITY ASSURANCE EVALUATION NOTES -

		DISCUSSED Yes/ No/ NA
1.		___ ___ ___
2.		___ ___ ___
3.		___ ___ ___
4.		___ ___ ___

CONTRACTORS QUALITY CONTROL REPORT (QCR)
DAILY LOG OF CONSTRUCTION - CIVIL

REPORT NUMBER 92

DATE 22 Jun 2001 - Friday

PROJECT North & South Pier Repair, Baloney Harbor, MI

CONTRACT NUMBER DACW35-02-C-#### NA

CONTRACTOR ABC Company, Inc. 555 Imagination Road, Fantasy, MI 49494

WEATHER
Weather Caused No Delay
Temperature Min 80 °F, Max 63 °F; 0.01 IN Precipitation; 10 MPH Wind

QC NARRATIVES

Activities in Progress:

Set and drove 24 sheets of SSP

Installing Miscellaneous Steel Waler sections c/s 4+00W to 4+50W

123 Tons of Fill stone placed between existing structure and req'd SSP wall from c/s 6+25 W to 6+75W.

Safety Inspection / Safety Meetings:

Weekly Safety Meeting held today - Use of PPE - Hrad hats & Work Vests

PREP/INITIAL DATES (Preparatory and initial dates held and advance notice)

A preparatory inspection was held today for the following feature:

Miscellaneous Steel & Handrail

An initial inspection was held today for the following feature:

Miscellaneous Steel & Handrail

ACTIVITY START/FINISH

The following activity was started today:

Activity No	Description
2001	Furnish & Place Fill Stone - 1st 18,000 Tons

No activities were finished today

QC REQUIREMENTS

The following 4 QC requirements were completed today:

Requirement No	Type	Description	Results
CT-00001	QC Testing	Check Plumbness of piles during driving	Completed
CT-00002	QC Testing	Check horizontal placement of piling (Check for Pile-Walk)	Completed
CT-00003	QC Testing	Check vibratory hammer driving rate for SSP - 12"/minute is the minimum rate. If exceeded, switch to Impact hammer.	Completed
CT-00004	QC Testing	Video Tape Interlocks of piling after driving SSP	Completed

QA/QC PUNCH LIST (Describe QC Punch List items issued, Report QC and QA Punch List items corrected)

The following QC Punch List item was issued today:

Item No	Location	Description
QC-00001	4+25W	Cut-off sheets to finish grade from 4+00W to 4+50W

No Punch List items were corrected today

CONTRACTORS ON SITE (Report first and/or last day contractors were on site)

No contractors had their first or last day on site today

LABOR HOURS

The following labor hours were Reported today:

Employer	Labor Classification	Number of Employees	Hours Worked
	IRONWORKER	3.0	10.0
	PILE DRIVING SETTER	2.0	10.0

ABC Company, Inc.	PILE DRIVER OPERATOR		1.0	10.0
Total hours worked to date: 30.0		Total	6.0	30.0

EQUIPMENT HOURS

The following equipment hours were Reported today:

Equipment ID	Description	Standby Hours	Operating Hours
00000002	Vibratory Hammer	0.0	10.0
00000003	Arc Welder	0.0	8.0
00000004	Crane - 100' Boom	0.0	10.0
Total operating hours to date: 28.0		Total 0.0	28.0

ACCIDENT REPORTING (Describe accidents)

No accidents reported today

CONTRACTOR CERTIFICATION **On behalf of the contractor, I certify that this Report is complete and correct and all equipment and material used and work performed during this Reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.**

QC REPRESENTATIVE'S SIGNATURE	DATE	SUPERINTENDENT'S INITIALS	DATE

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)	DATE 06/06/2002	TRANSMITTAL NO. 02486-37.2

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO: Grand Haven Area Office 307 South Harbor Street P. O. Box 629 Grand Haven, MI 49417	FROM: ABC Company, Inc 555 Imagination Park Road Fantasy, MI 49494	CONTRACT NO. DACW35-02-C-#### NA	CHECK ONE: ☐ THIS IS A NEW TRANSMITTAL ☒ THIS IS A RESUBMITTAL OF TRANSMITTAL 02486-37.1
SPECIFICATION SEC. NO. (Cover only one section with each transmittal) 02486	PROJECT TITLE AND LOCATION		CHECK ONE: THIS TRANSMITTAL IS FOR ☒ FIO ☐ GOV'T. APPROVAL

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
12	Production Test Results	DATA	3	3.2.3.4				F

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

TRANSMITTAL OF SHOP DRWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating this form)*	DATE	TRANSMITTAL NO.

SECTION I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO:	FROM:	CONTRACT NO:	CHECK ONE: ☐ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL_____

SPECIFICATION SEC. NO *(Cover only one section with each transmittal)*	PROJECT TITLE AND LOCATION

ITEM NO. a.	DISCRIPTION OF ITEMS SUBMITTED *(Type size, model number/etc.)* b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction no. 8)* c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	 DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION *(see Instruction No. 6)* h.	FOR CE USE CODE i.

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated. _____ NAME AND SIGNATURE OF CONTRACTOR

SECTION II – APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY	DATE

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.

2. Each transmittal shall be numbered consecutively in the space provided for “Transmittal No.”. This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.

3. The “Item No.” will be the same “Item No.” as indicated on ENG FORM 4288 for each entry on this form.

4. Submittals requiring expeditious handling will be submitted on a separate form.

5. Separate transmittal form will be used for submittals under separate sections of the specifications.

6. A check shall be placed in the “Variation” column when a submittal is not in accordance with the plans and specification -- also, a written statement to that effect shall be included in the space provided for “Remarks”.

7. Form is self-transmittal, letter of transmittal is not required.

8. When a sample of material or Manufacturer’s Certificate of Compliance is transmitted, indicate “Sample” or “Certificate” in column c, Section I.

9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A -- Approved as submitted.

B -- Approved, except as noted on drawings.

C -- Approved, except as noted on drawings
Refer to attached sheet resubmission required.

D -- Will be returned by separate correspondence.

E -- Disapproved (see attached)

F -- Receipt acknowledged

FX -- Receipt acknowledged, does not comply as noted with contract requirements

G -- Other *(Specify)*

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

* U.S. Government Printing Office: 1991

REPORT OF OPERATIONS - PIPELINE, DIPPER OR BUCKET DREDGES

REPORTS CONTROL SYMBOL ENGCW-0-13

THRU:	TO:	FROM:	REPORT NO.

CHARACTER ☐ MAINTE-NANCE ☐ NEW WORK ☐ DAILY ☐ STATUS ☐ COMPLETION ☐ ANNUAL — DATE OR PERIOD

DREDGE

NAME AND TYPE	SIZE →	PIPELINE *in. dia. disch.*	DIPPER OR BUCKET *cu. yds. cap.*

HORSEPOWER OF →	DREDGE PUMP	SUCTION PIPE JET	CUTTER OR BUCKET	PROPULSION

NUMBER OF CREWMEMBERS →	DREDGE	SHORE	OTHER PLANT	TOTAL	WORK SCHEDULE →	SHIFTS PER DAY	DAYS PER WEEK

PROJECT AND BAR

NAME	AUTH DIMENSIONS →	WIDTH	DEPTH	OVERDEPTH

LOCATION *(include station numbers)*

CHARACTER OF MATERIAL

ABSOULTE DENSITY	IN PLACE DENSITY *GMS/Liter*	VOIDS RATIO

GRAIN SIZE	GEOLOGICAL CLASSIFICATION

CONTRACT OR DREDGING ORDER NUMBER — ☐ CONTRACTO ☐ HIRED LABOR — TOTAL NO. OF DAYS IN WHICH WORK WAS DONE

CHANNEL CONDITION

AVERAGE DEPTH →	BEFORE DREDGING	AFTER DREDGING	MINIMUM SOUNDING →	BEFORE DREDGING	AFTER DREDGING

RIVER STAGE

MINIMUM	TIME	MAXIMUM	TIME	GAGE LOCATION

WEATHER CONDITION *(clear, cloudy, rain, snow, and fog)* — VISIBILITY *miles* — WIND *(maximum velocity & direction)*

WORK PERFORMED

ITEM	UNIT	QUANTITY
AVERAGE WIDTH OF CUT	FEET	
TOTAL ADVANCE THIS PERIOD	FEET	
TOTAL ADV. PREVIOUS TO THIS PERIOD	FEET	
TOTAL ADVANCE TO DATE	FEET	
FLOATING PIPE: SHORE PIPE:		
TOTAL LENGTH OF DISHARGE PIPE	FEET	
AVERAGE LIFT	FEET	
AVERAGE PUMP SPEED	R.P.M.	
AVG. DREDGED PER PUMP. HR, GROSS	CU.YDS.	
SCOWS LOADED	NUMBER	
AVERAGE LOAD PER SCOW	CU. YDS.	

CUBIC YARDS REMOVED

AMOUNT DREDGED THIS PERIOD:
(1) GROSS *(computed amount)*
(2) CREDITED *(pay place)*

AMOUNT PREVIOUSLY REPORTED:
(1) GROSS *(computed amount)*
(2) CREDITED *(pay place)*

TOTAL AMOUNT DREDGED TO DATE:
(1) GROSS *(computed amount)*
(2) CREDITED *(pay place)*

ATTENDANT PLANT

ITEM	NAME OR NUMBER	HOURS

NUMBER OF INSPECTIONS BY DISTRICT PERSONNEL — BY DIV & OCE PERSONNEL

CONTRACT USE ONLY HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? ☐ NO ☐ YES *(If "YES", explain under remarks on back)*

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME *(chargeable to cost of work)*	HOURS	MIN.
PUMPING OR DREDGING		
PCT. OF EFFECTIVE RENTAL TIME		
BOOSTER *(in line)* *Hrs.* *Min*		
NON-EFFECTIVE WORKING TIME *(chargeable to cost of work)*		
HANDLING PIPE LINES		
HANDLING ANCHOR LINES		
CLEARING PUMP AND PIPE LINE		
CLEARING CUTTER OR SUCTION HEAD		
WAITING FOR SCOWS		
TO AND FROM WHARF OR ANCHORAGE		
CHANGING LOCATION OF PLANT ON JOB		
LOSS DUE TO OPPOSING NATURAL ELEMENTS		
LOSS DUE TO PASSING VESSELS		
SHORE LINE AND SHORE WORK		
WAITING FOR BOOSTER		
MINOR OPER. REPAIRS *(explain in remarks)*		
WAITING FOR ATTENDANT PLANT		
PREPERATION AND MAKING UP TOW		
TRANSFERRING PLANT BETWEEN WORKS		
LAY TIME OFF SHIFT AND SATURDAYS		
SUNDAYS AND HOLIDAYS		
FIRE DRILL		
MISCELLANEOUS *(explain in remarks)*		
TOTAL NON-EFFECTIVE WORKING TIME		
PCT. OF NON-EFFECTIVE RENTAL TIME		
TOTAL EFFECTIVE AND NON-EFFECTIVE TIME *(chargeable to cost of work)*		
PCT. OF TOTAL TIME IN PERIOD		
LOST TIME *(not chargeable to cost of work)*		
MAJOR REPAIRS AND ALTERATIONS		
CESSATION		
COLLISIONS		
MISCELLANEOUS *(explain in remarks)*		
TOTAL LOST TIME		
PERCENTAGE OF TOTAL TIME		
TOTAL TIME IN PERIOD		

ENG FORM 4267
JAN 70

REPLACES ENG FORM 28 *(Costs)*, 1 MAR 53, AND ENG FORM 29 *(Costs)*. 1 JAN 62, WHICH ARE OBSOLETE. *(ER 1125-2-304)*

(Signature and Renarks required on reverse side.)

SUMMARY OF COSTS

ITEMS	COST
DIRECT PLANT OPERATING COSTS	
UNIFORM DAILY RATE BASIS *(To be completed when submitting Status and Completion reports.)*	
CHARGES: _____ DAYS AT _____ PER DAY *(Item 19, ENG Form 22 (Costs)-adjusted to exclude plant increment cost.)* ▶ **OR** ◀	
ACTUAL PLANT COSTS *(To be completed when submiting Annual report.)*	
PAYROLLS *(gross)*	
SUBSISTENCE & QUARTERS OR ~~PER DIEM &~~ MILEAGE	
FUEL BARRELS AT PER BARREL	
WATER	
LUBRICANTS	
PLANT OWNERSHIP COSTS *(as computed below)*	
INSURANCE	
ATTENDANT PLANT	
MISCELLANEOUS	
SUBTOTAL - UNIFORM DAILY RATE OR ACTUAL	
SHORE WORK	
SUBTOTAL- SHORE WORK COSTS	
OTHER COSTS	
SURVEYS	
INSPECTION AND SUPERVISION	
OVERHEAD	
OTHER INDIRECT COSTS	
SUBTOTAL - OTHER COSTS	
~~SUBTOTAL - OTHER UNIT COST PER CUBIC YARD.~~	
GRAND TOTAL - ALL COSTS	

OPERATING SUPPLIES

COMMODITIES	CONSUMED		INVENTORY	
	UNIT	QUANTITY	QUANTITY	VALUE
FUEL *(oil)*	**BBLS**			
LUBRICANT *(oil)*	**GAL**			
LUBRICANT *(grease)*	**LBS**			
WATER	**GAL**			

SUBSISTENCE SUPPLIES	
MISCELLANEOUS SUPPLIES	
TOTAL	

ANNUAL REPORT DATA
(complete when submitting Annual report.)

	per min.
COST PER RENTAL MINUTE *(Based on total operating cost)*	
TOTAL COST OF PLANT *(End of F.Y. reporting period)*	
BOOK VAULE *(End of F.Y. reporting period)*	
BALANCE IN PLANT ACCOUNT *(End of F.Y. reporting period)*	
PLANT OWNERSHIP COSTS *(Actual for F.Y. reporting period)*:	
DEPRECIATION	
REPAIRS *(Adjusted)*	
CESSATION OF WORK	
SMALL TOOLS, ETC.	
TOTAL	

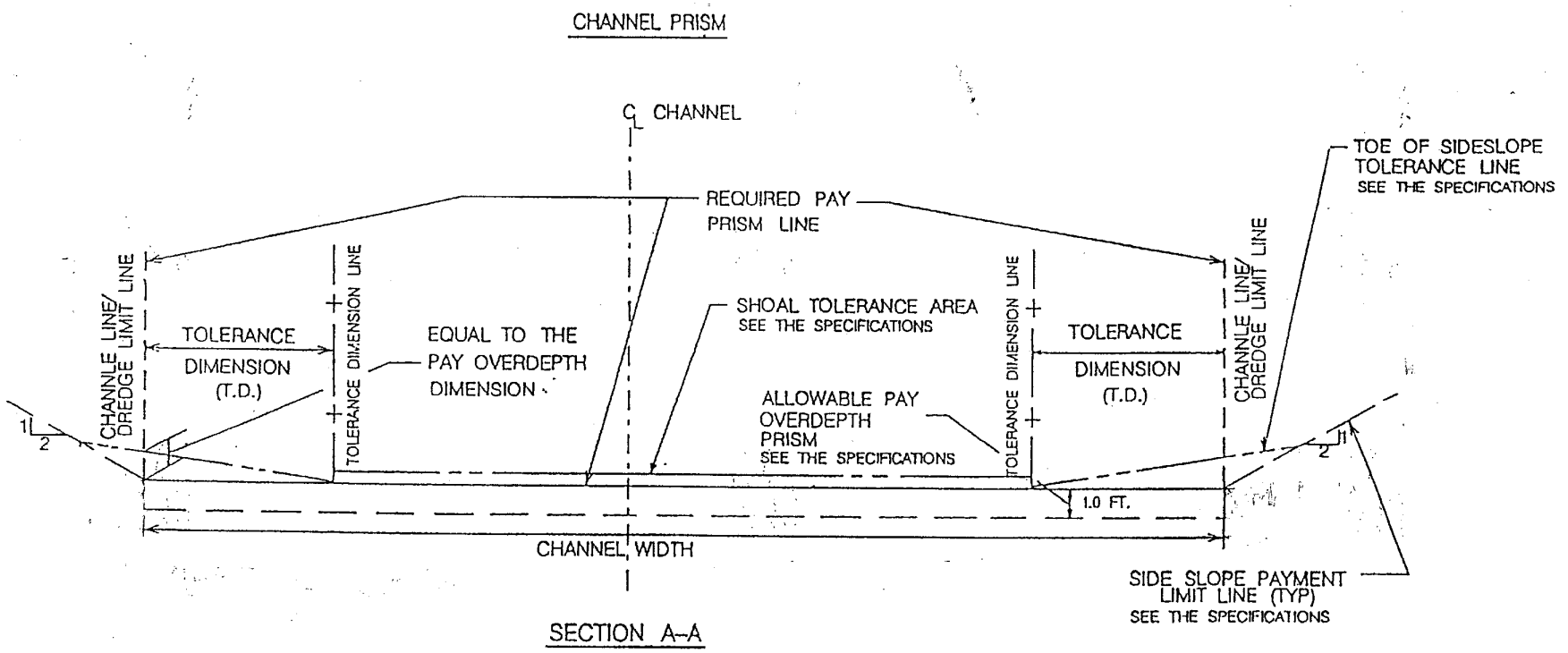
REMARKS

SUBMITTED BY *(Name, title, and signature)*	RECOMMENDED BY *(Name, title, and signature)*	APPROVED BY *(Name, title, and signature)*

(REVERSE OF ENG FORM 4267)

U.S. GOVERNMENT PRINTING OFFICE: 1970 OF-376-067

SEE THE SPECIFICATIONS – SUBPARAGRAPH "OVERDEPTH AND TOLERANCES" SECTION 02482 "DREDGING"



NOTE: THE EXISTING CHANNEL BOTTOM IS NOT SHOWN

See the Subparagraph "Overdepth and Tolerances" SECTION 02482 "DREDGING"

CHANNEL SHOAL TOLERANCE

Subparagraph

NINTH DISTRICT LOCAL NOTICE TO MARINERS
GENERAL NOTICE ENTRY FORM

1. NAME OF COMPANY:_____

2. TYPE OF OPERATION:_____

3. LOCATION:_____

4. COMMENCE DATE: _____ COMPLETE DATE: _____

5. HOURS OF OPERATION:_____ TO:_____

6. DAYS OF OPERATION:_____ TO:_____

7. NAME OF CONTACT VESSEL:_____

8. VHF - FM CHANNELS MONITORED:_____

9. SPECIAL REQUIREMENTS/REMARKS:_____

_____

_____

10. FOR FURTHER INFORMATION CONTACT:_____

11. TELEPHONE #: _____

12. SIGNATURE:_____ DATE:_____

" NOTE "

TEMPORARY MOORING BUOYS ARE REQUIRED TO BE WHITE WITH A BLUE HORIZONTAL BAND AROUND THE CIRCUMFERENCE OF THE BUOY AND THE WATER LINE. FOR MORE DETAILS CONCERNING REGULATIONS OF MOORING BUOYS REFER TO 33 CODE OF FEDERAL REGULATION PART 66.10-45. A COLOR DEPICTION OF A MOORING BUOY CAN BE FOUND I THE LIGHT LIST VOL. VII GREAT LAKES 1989 (PLATE 4).

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
FY05 M/D CASEVILLE HARBOR, MI

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAG # RAPH	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01100	SD-01 Preconstruction Submittals															
			Accident Prevention Plan		G	AOF												
			Payrolls and Basic Records		G	AOF												
			Progress Chart		G	AOF												
			Additional Real Estate Rights	1.1.3	G	RED												
		01130	SD-01 Preconstruction Submittals															
			Environmental Protection Plan	1.5	G	AOF												
		01451	SD-01 Preconstruction Submittals															
			Quality Control Plan	3.2	G	AOF												
		01525	SD-01 Preconstruction Submittals															
			Site Safety & Health Officer		G	AOF												
			Qualification (SSHO)															
			Accident Prevention Plan (APP)	1.8	G	AOF												
			Activity Hazard Analysis (AHA)	1.9	G	AOF												
			SD-06 Test Reports															
			Reports	1.13														
			Accident Reports	1.13.1														
			Monthly Exposure Reports	1.13.3														
			Regulatory Citations and	1.13.4														
			Violations															
			SD-07 Certificates															
			Confined Space Entry Permit															
		02482	SD-01 Preconstruction Submittals															
			Dredging, Conveyance and	1.4	G	AOF												
			Disposal Plan															

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
FY05 M/D CASEVILLE HARBOR, MI

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAG # RAPH	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		02482	SD-09 Manufacturer's Field															
			Reports															
			Sounding Records		G	AOF												

SURVEY CONTROL DATA

STATION NAME TBM Ramp SHEET _____ NUMBER _____

PROJECT Caseville Harbor CHANNEL/REACH _____

QUAD _____ NOAA CHART # _____

CITY/TWP Caseville COUNTY Huron STATE MI SEC ____ TWP ____ RANGE ____

MARKER TYPE _____ SET BY COE Saginaw DATE SET June 2001

HORIZONTAL

DATUM _____ LATITUDE _____ LONGITUDE _____

X(E) _____ Y(N) _____ (US FOOT)

STATE _____ PROJECTION _____ ZONE _____ CODE _____

AZIMUTH MARK **GRID AZIMUTH**

_____ _____

_____ _____

VERTICAL

ELEVATION IN FEET: IGLD 55 _____ IGLD 85 583.591 ft.

NGVD 29 _____ NAVD 88 _____ OTHER _____

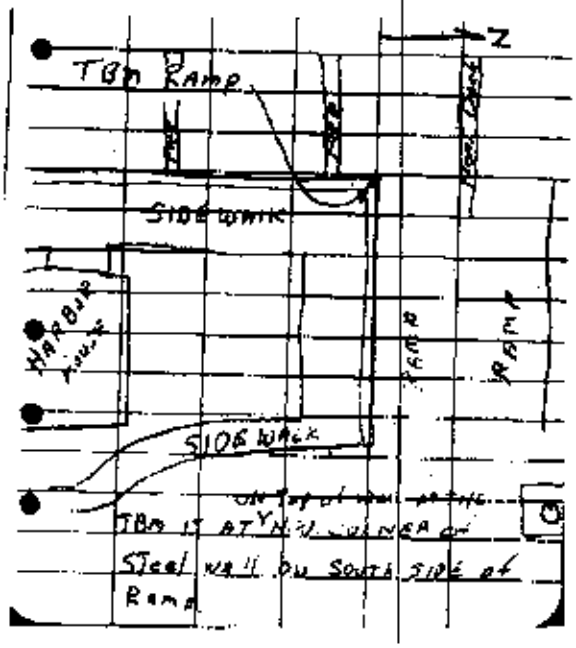
PROPERTY OWNER Caseville Harbor Comm. ACCESS NOTES _____

_____

DESCRIPTION

TBM is on Top of a Steel wall at the N.W. Corner, South side of Boat Ramp. Boat Ramp is located at the Caseville Harbor commission Docking Facility

SKETCH:



SURVEY CONTROL DATA

STATION NAME C-10 SHEET 3 of 3 NUMBER

PROJECT Caseville Harbor CHANNEL / REACH

QUAD NOAA CHART #

CITY/TWP Caseville COUNTY Huron STATE MI SEC 35 TWP 18N RANGE 10E

MARKER TYPE Copper weld SET BY DATE SET

HORIZONTAL

DATUM LATITUDE LONGITUDE

X(E) 13,410,620.50 Y(N) 892,951.05 (US FOOT)

STATE Mich PROJECTION Lambert ZONE South CODE 2113

AZIMUTH MARK **GRID AZIMUTH.**

VERTICAL

ELEVATION IN FEET: IGLD 55 IGLD 85

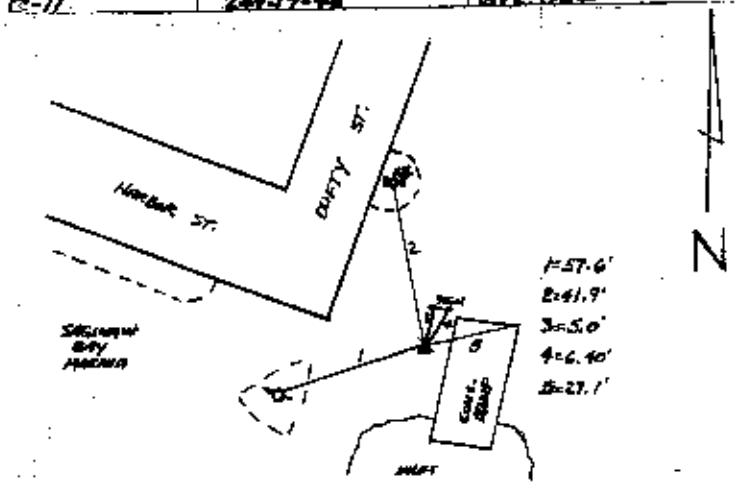
NGVD 29 NAVD 88 OTHER

PROPERTY OWNER ACCESS NOTES

DESCRIPTION

A Copper rod 41.9' South of fire Hydrant by East Side of Dufty Street, 5.0' & 6.4' respectively South of Signs.

OBJECT	GRID AZIMUTH O NORTH	GRID DIST. IN FEET
C-9	88-40-48	283.566
C-11	249-47-48	692.824



STATION RECOVERY

PROJECT Caseville Harbor	COUNTY HURON	STATE MI.
NAME PT. 6	STAMPINGS	AGENCY
TYPE 1/2" PIN	CONDITION Good / 85	

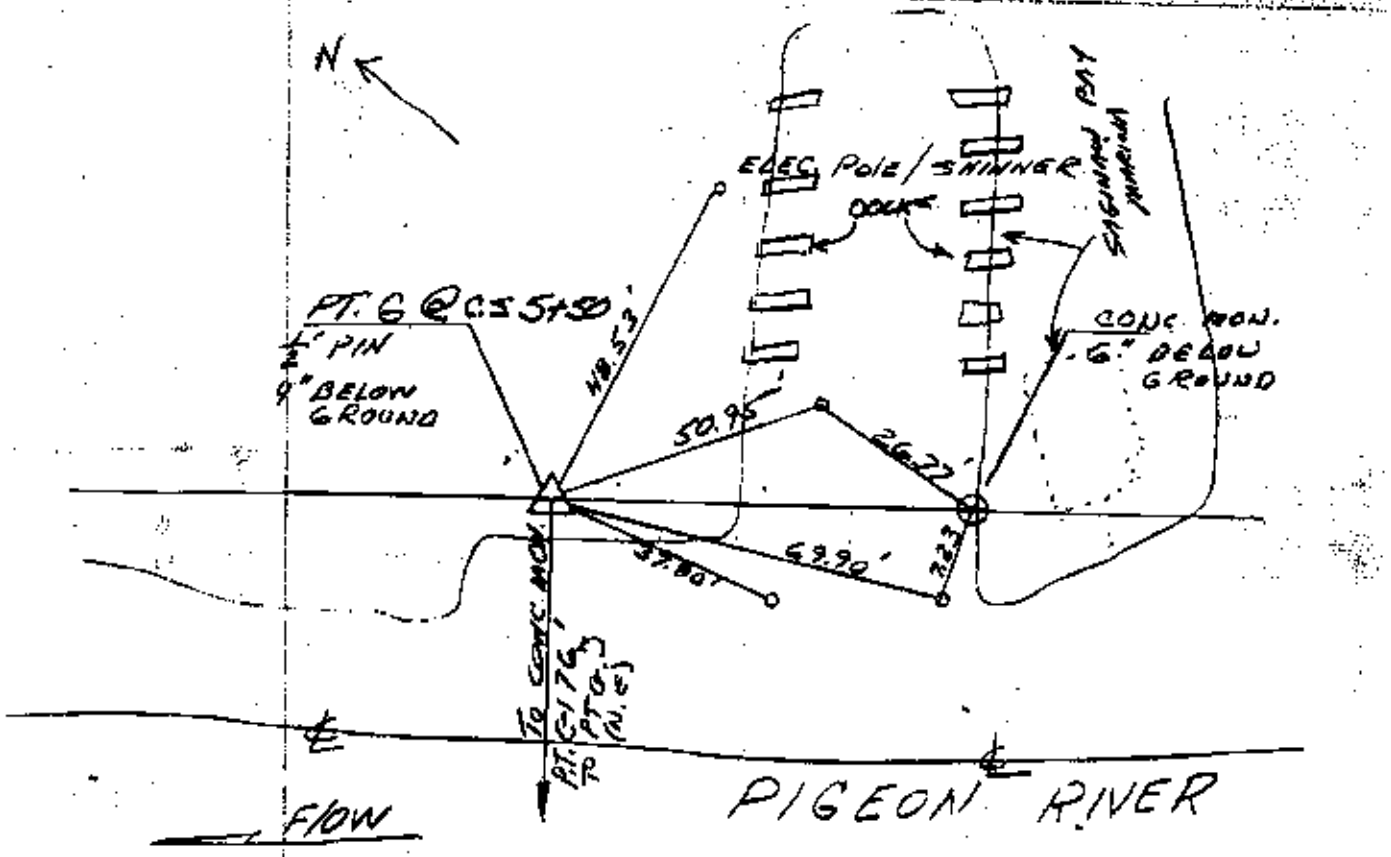
DESCRIPTION

1/2" Pin set 4" below ground surface

DRAW SKETCH ON REVERSE SIDE Michigan Lambert Projection S. Zone

BY	HORIZONTAL DATA	VERTICAL DATA
DATE	EASTING 13,410,160.91	IGLD
OFFICE	NORTHING 892,880.69	USC&GS

NGS FORM 45
(MAY 1979)



STATION RECOVERY

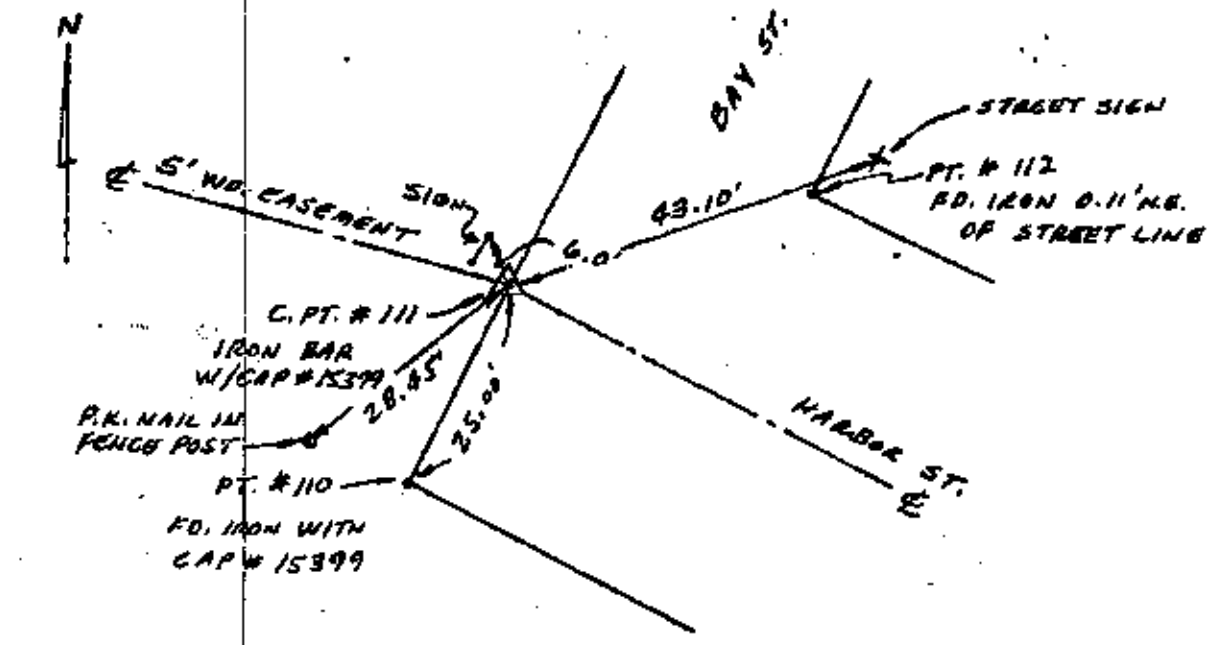
PROJECT CASEVILLE HARBOR	COUNTY HURON	STATE MI.
NAME C. PT. # 111	STAMPINGS	AGENCY MPK
TYPE IRON BAR IN CONC. RLS. CAP # 15399	CONDITION	

DESCRIPTION AT CASEVILLE, C. PT. #111 IS AN IRON BAR IN CONCRETE LOCATED N 70°E 43.10' FROM STREET SIGN, N 30°W 6.0' FROM N. LEG OF SIGN, S 50°W 28.45' FROM P.K. NAIL IN FENCE POST, AND INTERSECTION OF ℄ HARBOR ST. 50' WD. WITH NORTH LINE OF BAY ST. 25' WD.

DRAW SKETCH ON REVERSE SIDE

BY MPK	HORIZONTAL DATA	VERTICAL DATA
DATE 1980	EASTING 13,409,911.02	IGLD
OFFICE	NORTHING 893,227.13	USC&GS

NCE FORM 43
(MAY 1970)



STATION RECOVERY

PROJECT CASEVILLE HARBOR	COUNTY HURON	STATE MI
NAME C.PT #105	STAMPINGS	AGENCY MPK
TYPE	CONDITION	

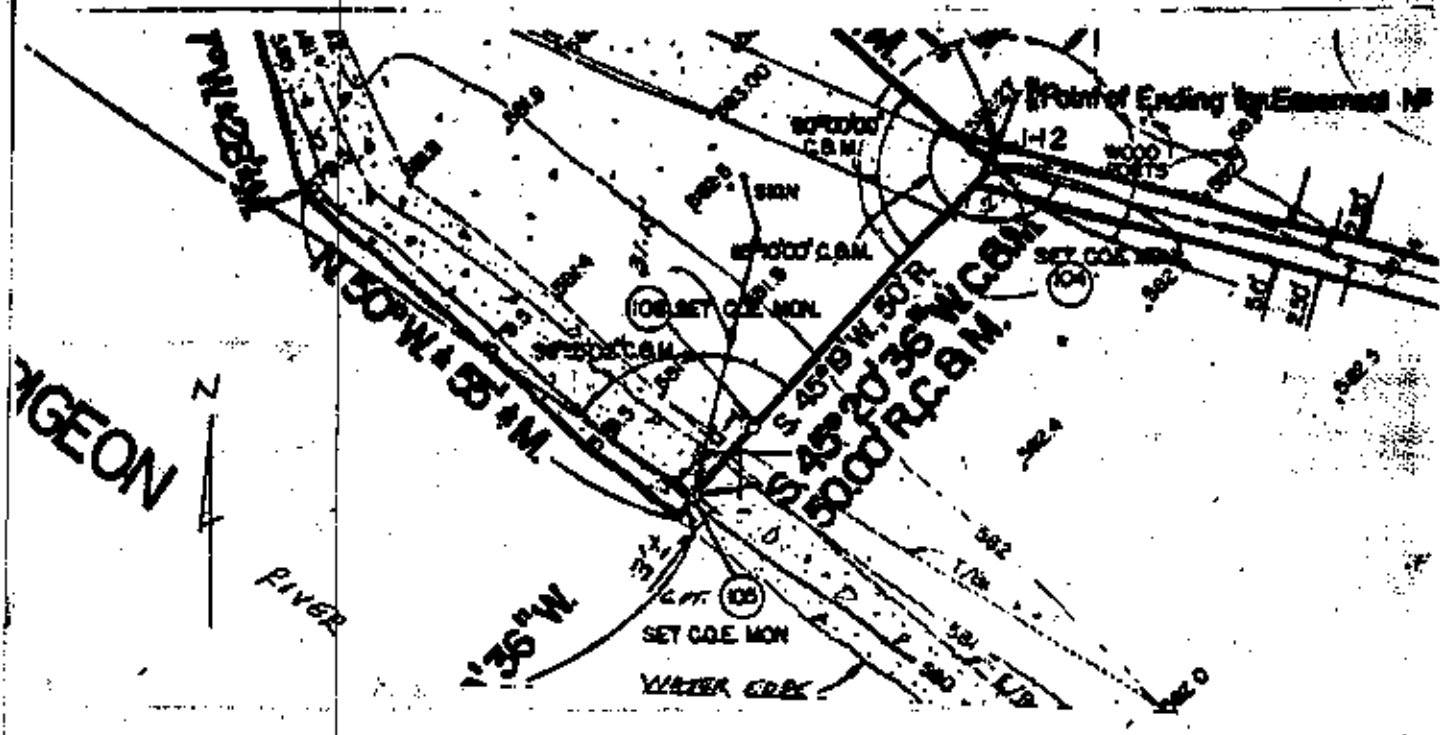
DESCRIPTION

AT CASEVILLE, C.PT#105 IS A CORPS OF ENGINEERS ALUM. DISK LOCATED N 45°E, 10.00' FROM C.PT.#108, N 10°E 31.15' FROM SOUTH LEG OF CORPS. SIGN., S 45°W 3'± FROM WATER EDGE OF PIGEON RIVER; AND N 45°E 60' FROM C.PT. #104.

DRAW SKETCH ON REVERSE SIDE

BY MPK	HORIZONTAL DATA	VERTICAL DATA
DATE 1980	EASTING 13,409,623.66	IGLD
OFFICE	NORTHING 893,259.59	USC&GS

NOS FORM 43
(MAY 1970)



STATION RECOVERY

PROJECT CASEVILLE HARBOR	COUNTY HURON	STATE MI
NAME C.PT. # 108	STAMPINGS	AGENCY MRK
TYPE CORPS DISK ON ROD	CONDITION	

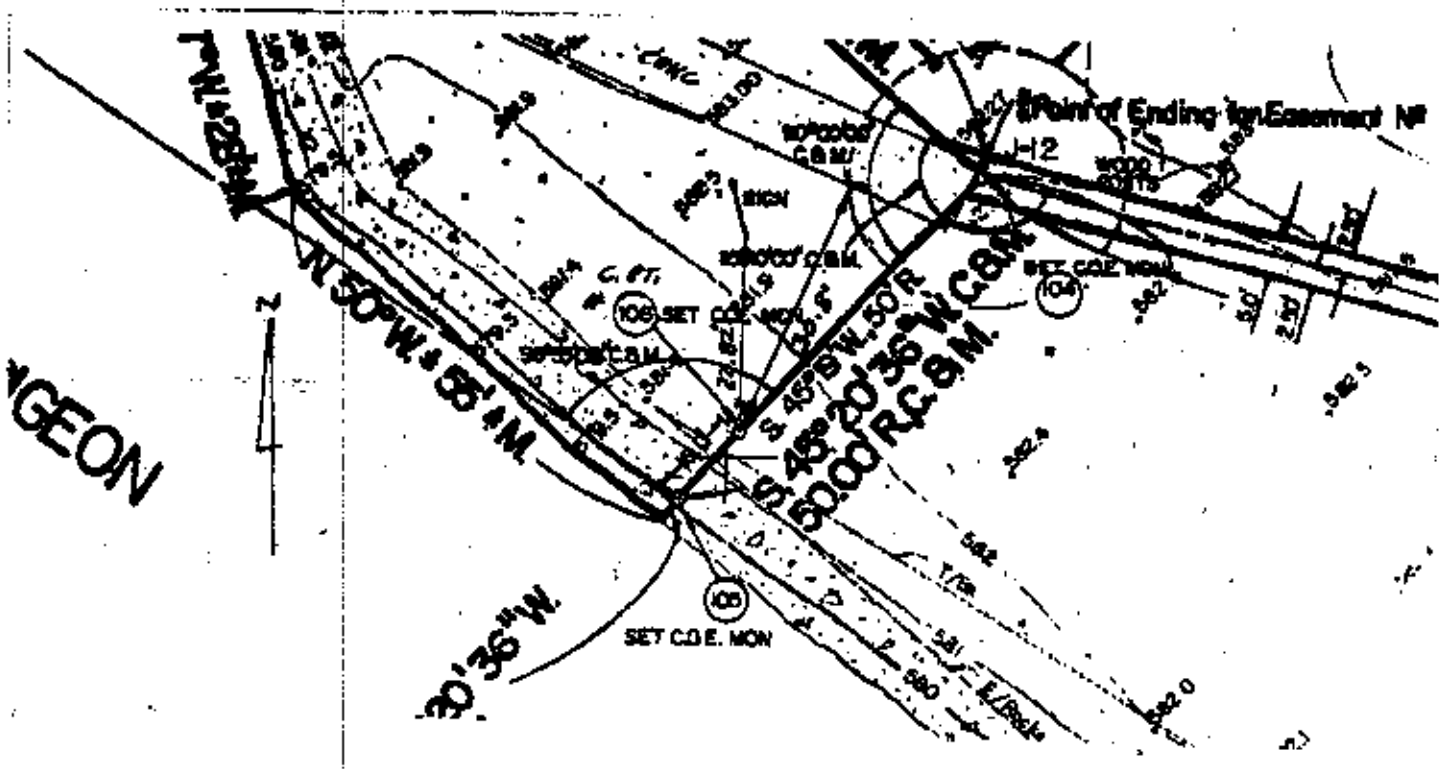
DESCRIPTION

AT CASEVILLE, C.PT. #108 IS A CORPS OF ENGINEERS ALUM. DISK LOCATED NORTH 22.62' FROM SOUTH LEG OF CORPS SIGN, N 20°E 30.8' FROM SOUTH EDGE OF CONC. BREAKWATER WALK, AND S 45°W 10.00' FROM C.PT. #105 DISK.

DRAW SKETCH ON REVERSE SIDE

BY MRK	HORIZONTAL DATA	VERTICAL DATA
DATE 1980	EASTING 13,409,630.17	IGLD
OFFICE	NORTHING 893,267.18	USC&GS

NCE FORM 43
(Rev 1970)



SURVEY CONTROL DATA

STATION NAME C-12 SHEET 3 of 3 NUMBER _____

PROJECT Caseville Harbor CHANNEL/REACH _____

QUAD _____ NOAA CHART # _____

CITY/TWP Caseville COUNTY Huron STATE Mi SEC 35 TWP 18N RANGE 10 E

MARKER TYPE Copperweld Rod SET BY _____ DATE SET _____

HORIZONTAL

DATUM _____ LATITUDE _____ LONGITUDE _____

X(E) 13,410,595.66 Y(N) 892165.78 (US FOOT)

STATE Mich. PROJECTION Lambert ZONE South CODE 2113

AZIMUTH MARK **GRID AZIMUTH.**

_____ _____

_____ _____

VERTICAL

ELEVATION IN FEET: IGLD 55 _____ IGLD 85 _____

NGVD 29 _____ NAVD 88 _____ OTHER _____

PROPERTY OWNER _____ ACCESS NOTES _____

_____

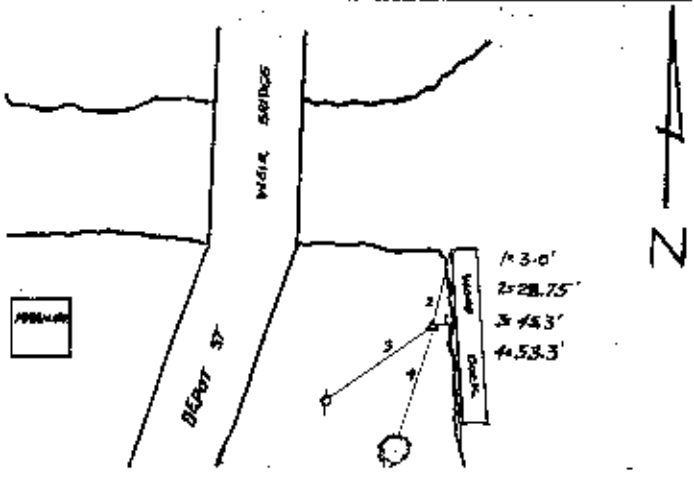
DESCRIPTION

A Copperweld rod driven flush with grnd, about 3.0' W. of wood Dock, E. of Depot St, also, from INTER-SECTION of Mich. ST & Depot St. Go N. 0.30 miles to the STATION on the right. (E.)

_____

_____

OBJECT	GRID AZIMUTH O NORTH	GRID DIST. IN FEET
C-11	311-17-08	819.770
C-13	175-09-07	342.698



SURVEY CONTROL DATA

STATION NAME C-11 SHEET 3 of 3 NUMBER

PROJECT Caseville Harbor CHANNEL/REACH

QUAD NOAA CHART #

CITY/TWP Caseville COUNTY Huron STATE Mi SEC 35 TWP 18N RANGE 10E.

MARKER TYPE Copperweld Rod SET BY DATE SET

HORIZONTAL

DATUM LATITUDE LONGITUDE

X(E) 13,409,974.35 Y(N) 892,700.76 (US FOOT)

STATE Mich. PROJECTION Lambert ZONE South CODE 2113

AZIMUTH MARK **GRID AZIMUTH.**

VERTICAL

ELEVATION IN FEET: IGLD 55 IGLD 85

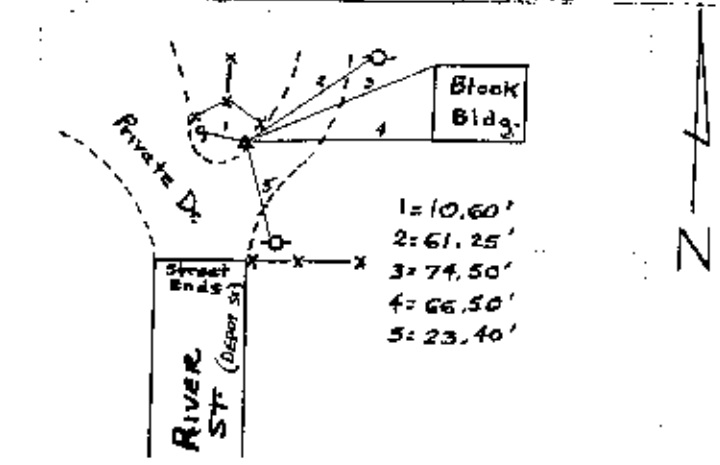
NGVD 29 NAVD 88 OTHER

PROPERTY OWNER ACCESS NOTES

DESCRIPTION

A copperweld rod at west edge of private drive at end of River St. from the intersection of Michigan St & Depot St. Go North 1/2 0.50 miles to station.

OBJECT	GRID AZIMUTH O NORTH	GRID DIST. IN FEET
C-10	69-17-48	692.824
C-12	131-12-08	819.770



SURVEY CONTROL DATA

STATION NAME C-13 SHEET 3 of 3 NUMBER

PROJECT Caseville Harbor CHANNEL/REACH

QUAD NOAA CHART #

CITY/TWP Caseville COUNTY Huron STATE MI SEC 35 TWP 18N RANGE 10E

MARKER TYPE Copper weld Rod SET BY DATE SET

HORIZONTAL

DATUM LATITUDE LONGITUDE

X(E) 13,410,627.44 Y(N) 891,824.51 (US FOOT)

STATE Mich PROJECTION Lambert ZONE South CODE 2113

AZIMUTH MARK **GRID AZIMUTH.**

VERTICAL

ELEVATION IN FEET: IGLD 55 IGLD 85

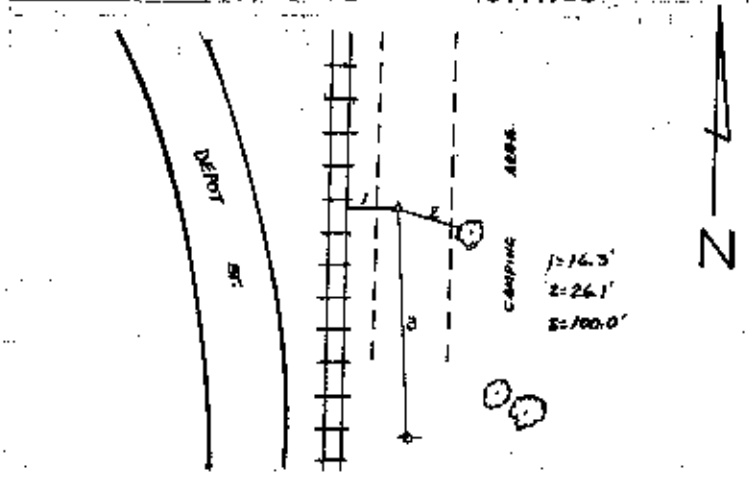
NGVD 29 NAVD 88 OTHER

PROPERTY OWNER ACCESS NOTES

DESCRIPTION

STA. C-13 is a copper-coated Rod driven flush with grnd. Located from intersection of Mich. ST & Depot ST., North 0.25 miles to STA. on the right, 16.3' East R/R Trackes

OBJECT	GRID AZIMUTH @ NORTH	GRID DIST. IN FEET
C-12	355-09-07	342.678
C-14	177-22-16	644.736



SURVEY CONTROL DATA

STATION NAME Point C SHEET _____ NUMBER _____

PROJECT Caseville Harbor CHANNEL/REACH _____

QUAD _____ NOAA CHART # _____

CITY/TWP Caseville COUNTY Huron STATE Mi SEC 35 TWP 18N RANGE 10E.

MARKER TYPE Bronze Disc SET BY _____ DATE SET _____

HORIZONTAL

DATUM _____ LATITUDE _____ LONGITUDE _____

X(E) 13410052.03 Y(N) 892742.38 (US FOOT)

STATE Mich PROJECTION Lambert ZONE South CODE 2113

AZIMUTH MARK **GRID AZIMUTH**

_____ _____

_____ _____

VERTICAL

ELEVATION IN FEET: IGLD 55 _____ IGLD 85 _____

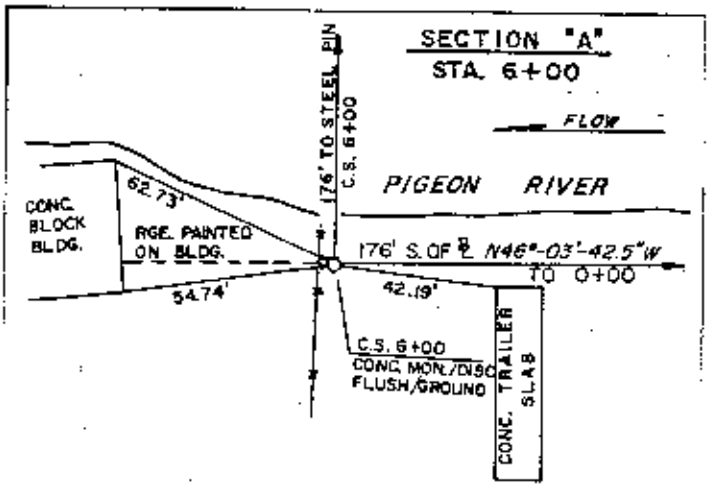
NGVD 29 _____ NAVD 88 _____ OTHER _____

PROPERTY OWNER _____ ACCESS NOTES _____

_____

DESCRIPTION

STA "C" is a bronze Disc, set in a concrete Cylindrical Monument flush with Ground, South side of the Pigeon River at Caseville Mi.



SURVEY CONTROL DATA

STATION NAME Point D SHEET _____ NUMBER _____

PROJECT Caseville Harbor CHANNEL/REACH _____

QUAD _____ NOAA CHART # _____

CITY/TWP Caseville COUNTY Huron STATE Mi. SEC 35 TWP 18N RANGE 10E

MARKER TYPE + in Sidewalk SET BY _____ DATE SET _____

HORIZONTAL

DATUM _____ LATITUDE _____ LONGITUDE _____

X(E) 13,410,507.77 Y(N) 892,383.63 (US FOOT)

STATE Mich. PROJECTION Lambert ZONE South CODE 2113

AZIMUTH MARK **GRID AZIMUTH.**

_____ _____

_____ _____

VERTICAL

ELEVATION IN FEET: IGLD 55 _____ IGLD 85 _____

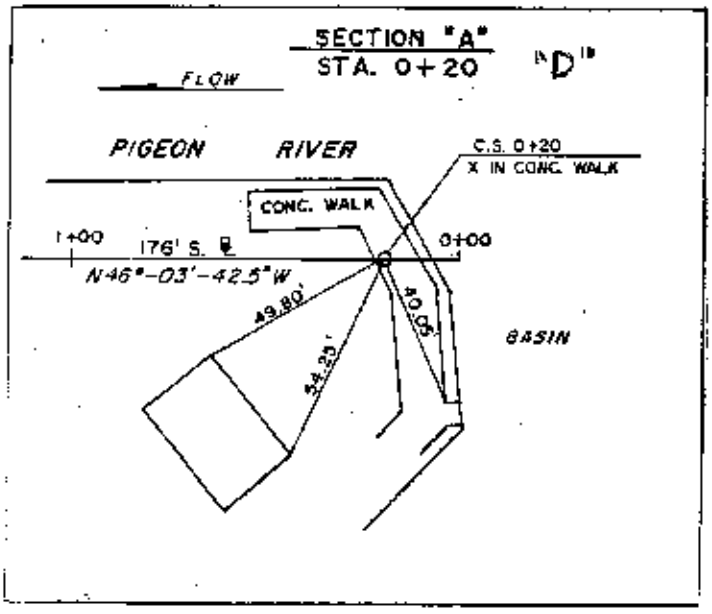
NGVD 29 _____ NAVD 88 _____ OTHER _____

PROPERTY OWNER _____ ACCESS NOTES _____

_____

DESCRIPTION

Sta. "D" is + chiseled in Sidewalk at the Pigeon River Basin at C.S 0+20 at Caseville Mich.



General Decision Number: IL030018 04/22/2005 IL18

Superseded General Decision Number: IL020018

State: Illinois

Construction Types: Heavy (Dredging, and Marine)

Counties: Illinois Statewide.
MECHANICAL DREDGING (CLAMSHELL, DRAGLINE, AND BACKHOE) AND MARINE CONSTRUCTION):

ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, NEW YORK, OHIO, PENNSYLVANIA AND WISCONSIN DREDGING AND MARINE CONSTRUCTION
Dredging and Marine Construction Projects: floating/land equipment engaged in clamshell, backhoe and dragline dredging, marine construction, bridges,salvage operations and cranes, loaders, dozers, or other equipment used for disposal of dredge spoils or marine construction materials on land at the slip or dock, at the project site, where the above material/spoils is being handled, and all equipment utilized on breakwall/breakwater structures on the Great Lakes, Islands therein, their connecting and tributary waters, including the Illinois Waterway to the Lock at Lockport, Illinois, the New York State Barge Canal System between Tonawanda, New York and Waterford, New York and Oswego, New York, the Duluth-Superior area to the Fond du Lac Bridge Crossing (Minnesota State Highway 23) on the St. Louis River and on the St. Lawrence River eastward to the International Boundary near St. Regis, New York.

Modification Number	Publication Date
0	06/13/2003
1	02/27/2004
2	02/18/2005
3	03/25/2005
4	04/22/2005

SUIL2003-001 01/01/2005

MECHANICAL DREDGING (CLAMSHELL, DRAGLINE, AND BACKHOE) AND MARINE CONSTRUCTION):

	Rates	Fringes
Dredging:		
Fireman, Oiler, Deckhand, & Scowman (with dipper, hydraulic or other floating equipment engaged in hydraulic and dipper dredging operations)		
Pipeline men (both afloat & ashore including loading, unloading, maintaining, and handling pipelines for hydraulic dredges and sandboats Rangeman, Tankerman, Sweepman and service Truck Driver	$ 22.51	7.61+a+b

Lead Deckhand	$ 29.68	7.61+a+b
Hydraulic Dredging		
LAUNCH OPERATOR - Vessel 800 Horse- Power Or Less	$ 25.15	7.61+a+b
TUG ENGINEER	$ 26.49	7.61+a+b
TUG OPERATOR - Vessel Over 800 Horse-Power	$ 26.49	7.61+a+b
TUG WORKERS: Fireman, Lineman, Oiler, Deckhand, Tankerman. Scowman, (on/or with tugboats, launches, or other self-propelled boats)	$ 22.51	7.61+a+b
Mechanic		
FLOATING EQUIPMENT: Illinois		
Class I	$ 42.70	12.70+b&c
Class II	$ 41.20	12.70+b&c
Class III	$ 36.65	12.70+b&c
Class IV	$ 30.50	12.70+b+c
FLOATING EQUIPMENT: Indiana		
Class I	$ 37.00	11.60+b&c
Class II	$ 35.50	11.60+b&c
Class III	$ 31.60	11.60+b&c
Class IV	$ 26.30	11.60+b&c
FLOATING EQUIPMENT: Michigan		
Class I	$ 28.25	16.48+b&c
Class II	$ 26.75	16.48+b&c
Class III	$ 23.80	16.48+b&c
Class IV	$ 19.80	16.48+b&c
FLOATING EQUIPMENT: Minnesota		
Class I	$ 33.25	10.10+b&c
Class II	$ 31.75	10.10+b&c
Class III	$ 28.30	10.10+b&c
Class IV	$ 23.50	10.10+b&c
FLOATING EQUIPMENT: New York:(Cattaraugus, Chautauga, Erie and Orleans Counties)		
Class I	$ 35.05	16.66+b&c
Class II	$ 33.55	16.66+b&c
Class III	$ 29.86	16.66+b&c
Class IV	$ 24.83	16.66+b&c
FLOATING EQUIPMENT: New York:(Cayuga, Jefferson, Oswego, and St. Lawrence Counties)		
Class I	$ 30.90	13.60+b&c
Class II	$ 29.15	13.60+b&c
Class III	$ 25.94	13.60+b+c
Class IV	$ 21.56	13.60+b&c
FLOATING EQUIPMENT: New York:(Monroe and Wayne Counties and the City of Rochester)		
Class A	$ 27.71	15.13+b&c
Class B	$ 27.00	15.13+b&c
Class C	$ 24.14	15.13+b&c
Crane	$ 28.71	15.13+b&c
Master Mechanic	$ 28.97	15.13+b&c

FLOATING EQUIPMENT:		
New York:(Niagara)		
Class I	$ 33.23	15.00+b&c
Class II	$ 31.73	15.00+b&c
Class III	$ 29.57	15.00+b&c
Class IV	$ 24.59	15.00+b&c
FLOATING EQUIPMENT:		
Ohio:(Ashtabula, Cuyahoga, Erie,Lake, and Lorain Counties)		
Class I	$ 32.99	8.60+b&c
Class II	$ 31.49	8.60+b&c
Class III	$ 28.02	8.60+b&c
Class IV	$ 23.30	8.60+b&c
FLOATING EQUIPMENT:		
Ohio:(Lucas, Henry, Ottawa, Wood and Sandusky Counties)		
Class I	$ 31.27	8.60+b&c
Class II	$ 29.77	8.60+b&c
Class III	$ 26.50	8.60+b+c
Class IV	$ 22.30	8.60+b&c
FLOATING EQUIPMENT:		
Pennsylvania:(Erie County):		
Class I	$ 24.80	10.23+b&c
Class II	$ 23.30	10.23+b&c
Class III	$ 20.74	10.23+b&c
Class IV	$ 17.24	10.23+b&c
FLOATING EQUIPMENT:		
Wisconsin:Includes all marine/floating type work on projects in the Superior/Duluth Harbor, Lake Superior.		
Class I	$ 32.60	13.95+b&c
Class II	$ 31.10	13.95+b&c
Class III	$ 27.70	13.95+b&c
Class IV	$ 23.05	13.95+b&c

PAID HOLIDAYS (WHERE APPLICABLE):

A- NEW YEAR'S DAY
B- MEMORIAL DAY
C- INDEPENDENCE DAY
D- LABOR DAY
E- THANKSGIVING DAY
F- CHRISTMAS DAY
G- PRESIDENT'S DAY
H- VETERAN'S DAY.

FOOTNOTES:
a. $30.10 per day per employee for mecical

b. Eight paid holidays: A thru H

c. Hazardous/Toxic Waste Material:

*Level A $2.50 per hour

*Level B 2.00 per hour

*Level C 1.00 per hour

*Level D 0.50 per hour
Such wages shall be above the classifications of work listed under mechanical dredging and Marine construction of this general wage decision. *Working with Hazardous Waste at this level as defined by the U. S. Enviromental Protection Agency.

CLASSIFICATION DESCRIPTIONS

Class I - Master Mechanic - assist and direct Class II, Class III, and Class IV, diver/wet tender, engineer (hydraulic dredge)

Class II - Crane/Backhoe Operator and Mechanic/Welder, assistant engineer(hydraulic dredge), leverman (hydraulic dredge), diver/tender

Class III - Deck Equipment Operator (Machineryman) Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 pounds or more), ug/launch operator, Loader/dozer and like equipment on Barge, breakwater wall, slip/dock, Scow, Deck Machinery, etc.

Class IV - Deck Equipment Operator(Machineryman/Fireman) (Four equipment units or more) and Crane Maintenance 50 ton capacity and under or Backhoe weighing 115,000 pounds or less, assistant tug operator.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter

* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE CONSTRUCTION

SECTION -02482

DREDGING

SECTION 02482

DREDGING

PART 1 GENERAL

1.1 UNIT PRICES

1.1.1 Measurement

1.1.1.1 Allowable Pay Overdepth and Sideslopes

The total estimated dredging quantity shown on the Bidding Schedule includes the required depth material plus the allowable overdepth material and allowable sideslope material. The allowable pay overdepth quantity listed below is computed for the allowable overdepth prism immediately below the material required to be dredged as shown on the drawings or otherwise specified. The allowable sideslope quantity listed below is computed immediately above the payment limit line for sideslopes as shown and specified.

a. Estimated Allowable Pay Overdepth and Sideslope Quantities in Cubic Yards.

CASEVILLE HARBOR
(1) Overdepth 9,600 C.Y.
(2) Sideslopes 750 C.Y.

1.1.1.2 Shoal Removal

If, before the contract is completed, shoaling occurs in any section previously accepted, including shoaling in the finished channel, because of the natural lowering of the side slopes or other natural causes, redredging at the contract unit price, within the limit of available funds, may be performed if agreed upon by both the Contractor and the Contracting Officer.

1.1.1.3 Soundings

The drawings (See CLAUSE entitled "CONTRACT DRAWINGS, MAPS AND SPECIFICATIONS") represent the conditions existing at the time of survey, but all soundings shown thereon will be verified and corrected by soundings taken before dredging. Determination of quantities removed will be made from after dredging soundings and the calculations made therefrom to determine quantities by in-place measurement. The determination of the quantities to be paid for in the area specified, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

1.1.1.4 Volume Calculations

Within the limits of the allowable pay overdepth and side slope payment limit lines described in the Paragraph entitled "DREDGING", the total amount of materials removed and to be paid for under the contract will be measured by the cubic yard in place by computing the volume between the

bottom surface shown by new soundings made before dredging and the bottom surface shown by the soundings of a survey made as soon as practicable after the work specified has been completed. Volume computations will be made by the Government by appropriate computer program or by the average end area method, based on cross sections including, but not limited to, cross sections taken at the same locations shown on the contract drawings. The average area of two (2) successive cross sections multiplied by the distance between the cross sections will be accepted as the volume. Any quantities misplaced or not satisfactorily placed in the approved disposal area will be deducted.

1.1.1.5 Excessive Dredging

Materials taken from beyond the limits specified in Subparagraphs "Allowable Pay Overdepth" and "Side Slopes", will be excluded from the computed total amount dredged as excessive channel dredging or excessive side slope dredging and for which payment will not be made. The final determination of the amounts of excessive dredging will be based wholly on the surveys made for final examination and acceptance. (See Paragraph entitled "FINAL EXAMINATION AND ACCEPTANCE.")

1.1.1.6 Monthly Partial Payments

Monthly partial payments will be based on quantities determined by daily soundings taken by the Contractor or other means acceptable to the Contracting Officer. (See CLAUSE entitled, "QUANTITY SURVEYS.") Sounding surveys for partial payment shall be conducted in the same manner specified in the Paragraph entitled, "PRIOR, AFTER AND CHECK SURVEYS," unless otherwise authorized or directed.

1.1.1.7 Continuity of Work

Monthly partial payments will be made for work performed prior to final examination and acceptance. However, as final dredging is being performed for final examination and acceptance, no payment will be made for such final dredging work performed in any area until the depth required under the contract is secured in the whole of such area, unless prevented by ledge rock, original material, or other obstructions, which cannot be removed by the plant specified in the accepted bid, or the equivalent of such plant, without blasting or special apparatus. No payment will be made for final excavation in any area not adjacent to and in prolongation of areas where full depth has been secured, except by decision of the Contracting Officer. If a nonadjacent area is excavated to full depth during the day to day operations carried on under the contract, payment for all work therein may be deferred until the required depth has been secured in the area intervening.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL DESCRIPTIONS":

SD-01 Data

Sounding Equipment Discription and Calibration Data

Verification that the Contractor's sounding equipment has been calibrated to correspond with the Government's sounding equipment shall be submitted

prior to commencing work. Also submit the description of the Contractor's sounding equipment and transducer frequency prior to commencing work.

Dredging, Conveyance and Disposal Plan; G-AOF

Prior to bringing equipment to the project site, submit plans of the proposed dredging, conveyance and disposal operations.

Dredging Placement Safety Plan

Prior to commencing work at the placement area, describe in detail the means and methods to be utilized to provide for the public safety at the placement area, all in accordance with the Accident Prevention Plan.

Notice of Start of Dredging

Provide ten calendar day's advance written notice of the planned start of actual dredging operations to allow the Government to schedule and perform the prior-to-dredging sounding survey work before arrival of the dredging equipment.

SD-09 Reports

Daily Report of Dredging Operation

Both sides of the report of operations form (ENG FORM 4267 or ENG FORM 27A), as appropriate to the type of work being performed, copies of which are available at Detroit District Area Offices, shall be completed and furnished daily. Each report shall contain a signed certification in the "REMARKS" space attesting that no overflow or discharge occurred from the dredging vessel(s) while dredging and while in transit from the dredging area to the unloading area. In the event an overflow or discharge occurs while dredging or while in transit, such certification shall not be made and instead an oral notification and complete written report on the incident shall be made to the Contracting Officer in shortest possible time. When appropriate and approved, quality control compliance inspections may be reported under the "REMARKS" item on the form. The Contractor shall submit an original and two (2) copies per calendar day to the Contracting Officer unless otherwise directed. An adequate supply of the report of dredging operation forms will be provided the Contractor by the Government upon request.

SD-09 Records

Sounding Records; G-AOF

A copy of the prior and after soundings shall be furnished to the Contractor.

1.3 PROJECT/SITE CONDITIONS

1.3.1 Character of Materials

Caseville Harbor:

The material to be removed within the required limits consists of the shoaling that has occurred since the last time the area was dredged consists of primarily medium to fine sand with some gravel and a trace of silt and organic materials. Cobbles and boulders may be encountered near

the revetments, breakwaters, and pierheads and shall not be removed if they are part of the harbor structure nor shall armor stone be undermined. The records of previous dredging and sampling are available for inspection at the District Office of the U.S. Army Corps of Engineers, Detroit District, 477 Michigan Avenue, McNamara Building, Detroit, Michigan 48226.

1.3.2 Placement Area Conditions

The limits of the placement area is shown on the contract drawing. Dredged materials placed outside of the limits of the placement area shall be removed at no additional cost to the Government and deposited within the area approved for placement of dredged materials.

1.4 SEQUENCING AND SCHEDULING

1.4.1 Delivery of Plant and Order of Work

Prior to bringing equipment to the project site, the contractor shall submit a Dredging, Conveyance and Disposal Plan describing in detail how he plans on accomplishing the proposed work under this contract. Unless otherwise directed by the Contracting Officer, the Contractor shall accomplish the required work within the time established in CLAUSE entitled,"COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK."

PART 2 PRODUCTS (NOT APPLICABLE)
PART 3 EXECUTION

3.1 DREDGING

Ten (10) calendar days prior to any work being performed the contractor shall provide written Notice of Start of Dredging to the Authorized Contracting Officer (A.C.O.) so that the Government can schedule and perform prior soundings. The Contractor shall perform all dredging work to remove material to the required depths within the limits shown on the drawings and as specified. Any materials in the allowable overdepth prism and allowable side slopes are not required to be removed. Rocks, cobbles (3 to 12 inches diameter) and boulders (over 12 inch diameter) may be encountered near breakwaters, revetments and pier heads and shall not be removed if they are part of the harbor structures nor shall toe stones be undermined. Indicated required dredging areas within required downstream and upstream dredging limits will be revised by the Government, after obtaining the before (prior to) dredging soundings. The Contractor shall be required to suspend dredging at any time when for any reason the gauges or ranges cannot be seen or properly followed.

3.1.1 Obstructions

Should original material, and ledge rock be encountered which cannot be removed by the plant specified in the accepted bid, or equivalent plant, without blasting or special apparatus, the Contractor shall remove therefrom all overlying material within the required dredging prism which in the judgment of the Contracting Officer can be removed by the use of the plant specified in the accepted bid or equivalent plant.

3.1.2 Channel Crossing

The Contractor shall verify the location of authorized crossings. Any existing channel crossing that is damaged due to the Contractor's operations shall be repaired by the Contractor and at its expense.

3.1.3 Overdepth and Tolerances

Two (2) drawings are enclosed in SECTION 01999 to aid in defining the requirements specified hereinafter.

3.1.3.1 Allowable Pay Overdepth

To cover inaccuracies of the dredging process, materials actually removed from within the channel lines to a depth of not more than one (1) foot below the required pay prism line will be measured and paid for at the contract unit price. However, the maximum quantity of overdepth materials to be paid for will be equivalent to that quantity present within the one (1) foot overdepth prism immediately below the required materials to be removed as determined from the prior to dredging soundings. Any dredging below the allowed one (1) foot will be considered as excessive dredging and for which payment will not be made.

3.1.3.2 Side Slopes

Materials actually removed, within limits shown on the drawings, to provide for final side slopes not flatter than one vertical (1V) on two horizonal (2H) at Caseville Harbor, perpendicular to the channel line or dredge limit line, whichever is applicable, but not in excess of the amount originally lying above the side slope payment limit line will be calculated and paid for, whether dredged in their original location or removed by dredging a space at the bottom of the slope to accommodate the up slope materials falling into the cut. The provisions of this Subparagraph also apply to end slopes at the upstream and downstream dredging limits of the channel. However, if the Contractor elects to use the box cut method on the side slope this material will be paid for whether dredged in their original location or removed by dredging a space at the bottom of the slope to accommodate the side slope materials falling into the box cut.

3.1.3.3 Toe of Side Slope

Any materials remaining above the required pay prism line will be allowed to remain in place, but will not be paid for, provided these materials lie below the tolerance line specified hereinafter. The toe of side slope tolerance line, as shown on the cross-section drawings, is defined as a straight line through the following two (2) points and extended to the side slope line:

a. A point on the required pay prism line located a distance from the channel line or dredge limit line, as shown on the contract drawings (shown on the enclosed drawings and contract drawings as tolerance dimension "T.D." and ;

b. A point located at the channel line or dredge limit line, whichever is applicable, and above the required pay prism line a distance equal to the specified channel allowable pay overdepth.

3.1.3.4 Shoals

A tolerance of 0.5 feet above the required pay prism line, in the remaining channel area, will be allowed for acceptance of remaining shoal materials. The allowed shoal materials may be left in place but shall be of such nature that they will not affect navigation, and will not be paid for

unless they are removed. The remaining channel area is defined as that portion of the channel which lies between the two (2) points located on the required pay prism line for determining toe of side slope tolerance line and is shown on the enclosed drawings titled "CHANNEL SHOAL TOLERANCE" as Tolerance Area. The allowed shoaling shall not be continuous throughout the required dredging area. The limitations for individual shoals are as follows:

a. Maximum width:

Maximum width of each remaining shoal area not required to be removed shall be not more than five percent (5%) of the full project channel width or ten (10) feet, whichever is greater.

b. Longitudinal length:

Longitudinal length of each remaining shoal area not required to be removed shall be not more than twenty-five percent (25%) of the full project channel width or fifty (50) feet, whichever is greater.

c. Cumulative width:

Cumulative width of remaining individual shoals not required to be removed within the shoal area, at any channel cross section, shall be not more than twenty-five percent (25%) of the full project channel width or ten (10) feet, whichever is greater.

3.2 CONVEYANCE AND TRANSFER OF DREDGED MATERIALS

3.2.1 General

All nautical vessels, pipelines and land based transport and conveyance systems shall be operated, loaded and unloaded in such manner as to prevent overflow, spills, leaks, waste, or other loss of dredged materials between point of pick-up and point of deposition within the placement area. Hauling vessels shall have sufficient sidewall height and integrity to prevent drainage over or through the sides and bottom during hauling.

3.2.2 Restriction

The method employed by the Contractor in conveying dredged materials to the placement area shall be as approved by the Contracting Officer at all times. Temporary dumping or placement of materials outside of the placement area for subsequent rehandling into the placement area is prohibited unless otherwise approved by the Contracting Officer.

3.3 DISPOSAL OF DREDGED MATERIALS

3.3.1 General

Prior to placement of dredge material, the Contractor will submit a Dredging Placement Safety Plan, describing in detail the means and methods to be utilized to provide for the public safety at the placement area. The dredged materials shall be deposited within the Government-furnished placement area shown on the contract drawings. The Government-furnished placement area has sufficient capacity to contain all materials to be dredged under this contract. Placement of the dredged materials within the placement area shall be as specified and shown except as otherwise

directed by the Contracting Officer. Except as otherwise authorized by the Contracting Officer in writing, no disposal shall be performed unless a representative of the Contractor for Quality Control is present at the time. The method employed by the Contractor in depositing dredged materials in the placement area shall be as approved by the Contracting Officer at all times.

3.3.1.1 Misplaced Material

Any material that is deposited elsewhere than in the places designated in this contract or approved by the Contracting Officer will not be paid for. The Contractor shall be required to remove such misplaced material at its expense and deposit it in the place designated in this contract or approved by the Contracting Officer.

3.3.2 Government-Furnished Placement Area

3.3.2.1 Location

As shown on the drawings and as specified, the dredged materials at Caseville Harbor shall be placed in an area bounded by the most landward 4.0 ft. contour and the most landward eight (8) foot depth contour and limits as shown on the contract drawing. Within these limits the dredged materials shall be evenly distributed along the entire length of the placement area, starting approximately 2.5 miles south of the harbor and extending 3,350 feet, parallel to the shoreline.

3.3.2.2 Placement

Placing of dredged materials within the placement area shall be as specified herein. The Contractor shall place the dredged material not to exceed the maximum elevation as allowed by this contract. The maximum elevation of deposited materials shall not exceed L.W.D. The Contractor shall not place dredged materials in more than eight (8) feet of actual water depth. At no time shall materials be deposited landward of the point at which the O.H.W.M., intersects the ground. Drainage shall be maintained lake ward across the placed dredged materials at all times. The materials shall be placed in such a manner which will not block or interfere with natural or constructed drainage ways into the lake. During placement the Contractor shall prevent erosion and disturbance of existing shoreline sediments. If shore ice is present during placement operations, dredged materials shall be placed directly upon the ice within the required limits.

3.4 CONTRACTOR QUALITY CONTROL

The Contractor shall establish and maintain a quality control system for dredging and placement operations to assure compliance with the contract requirements and provide a Daily Report of Dredging Operations by completing the appropriate form and completing all inspections of items under this system, including, but not limited to, the following:

a. Layout of work, and placement areas.

b. Proper dredging depths and placement heights.

c. Conveyance and placement operations.

d. Removal of misplaced material.

e. Safety requirements.

3.5 GOVERNMENT INSPECTION

3.5.1 Gauge Maintenance

The Contractor shall maintain its gauges, ranges, location marks and limit marks in proper order and position. The presence of a Government inspector shall not relieve the Contractor of its responsibility for the proper execution of the work in accordance with the specifications and drawings.

3.5.2 Facilities

The Contractor shall furnish, on the request of the Contracting Officer or any inspector, the use of such boats, boat operators, laborers and material forming a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting the work. However, the Contractor will not be required to furnish such facilities for the surveys prescribed in the Paragraph "FINAL EXAMINATION AND ACCEPTANCE."

3.5.3 Transportation

The Contractor shall furnish, on the request of the Contracting Officer or any inspector, suitable transportation from designated points on shore to and from the various pieces of off-shore plant and off-shore placement areas.

3.5.4 Compliance

Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer, and the cost thereof will be deducted from any amounts due or to become due the Contractor.

3.6 PRIOR, AFTER AND CHECK SURVEYS

Prior, after and check surveys will be made by sonic sounding methods. The Government will make prior and after surveys and may make check surveys. The Contractor shall make check surveys. Additional soundings will be taken as the Contracting Officer may deem necessary. Only one (1) prior survey will be made for the project, by the Government. If additional prior surveys are required, due to the Contractor's operations, the cost of such surveys shall be paid by the Contractor. The cost of such surveys shall be the same as specified in the Paragraph entitled, "FINAL EXAMINATION AND ACCEPTANCE.

3.7 FINAL EXAMINATION AND ACCEPTANCE

3.7.1 Examination

As soon as practicable after the completion of the entire work or any section thereof (if the work is divided into sections) as in the opinion of the Contracting Officer will not be subject to damage by further operations under the contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer. Should any shoals, lumps or other lack of contract depth be disclosed by this examination, the Contractor is required to remove same by dragging the bottom or by dredging at the

contract rate for dredging, but if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoals may be waived at the discretion of the Contracting Officer. The Contractor or its authorized representative will be notified when soundings and/or sweepings are to be made, and will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two (2) sounding or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping, the cost of such third and any subsequent sounding or sweeping operations will be charged against the Contractor at the rate of $2,500 per calendar day in which the Government plant is engaged in sounding or sweeping and/or is en route to or from the site or held at or near the said site for such operations.

3.7.2 Acceptance

Final acceptance of the whole or part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

END